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The North Carolina Digital Heritage Center (NCDHC) works with state memory and cultural institutions to provide online access to rare and unique historical materials related to North Carolina. As the archival and historical materials within the scope of the NCDHC mission are not the typical realm of public libraries, staff of public libraries may not be familiar with the unique concerns related to the appraisal and description of these materials in preparation for digitization. However, the NCDHC allows public libraries to provide remote access to their historical materials even if their experience with digitization is limited. The results of this study demonstrate that public libraries that wish to contribute materials to a collaborative digital initiative like the NCDHC can participate successfully in digitization projects, despite certain perceived obstacles.

Headings:

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THE NORTH CAROLINA DIGITAL HERITAGE CENTER AND COLLABORATIVE
ACTIVITIES OF CONTRIBUTING PUBLIC LIBRARIES

by
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Introduction

Public libraries are unique cultural institutions that provide their local communities with free, open access to information and services. They are typically associated with published monographs and journals and, more recently, with internet, database, e-book and other electronic resources. However, many public libraries also own historical materials that contain a wealth of information about the communities that they serve. Often these special collections remain hidden from the public because the library lacks an effective way to provide access to them (NC ECHO Project, 2007d). In the last few years, several public libraries in the state of North Carolina have taken steps to remedy this situation by participating in a statewide collaborative digitization project that works to publish these historical materials online. The North Carolina Digital Heritage Center (NCDHC) was created in 2009 and is housed at the University of North Carolina at Chapel Hill (UNC-CH). In early 2010, the NCDHC began working with state memory and cultural institutions on pilot digitization projects in an effort to provide access to rare and unique historical materials related to North Carolina (UNC University Libraries, 2011). The NCDHC facilitates this process by providing free or low-cost digitization and online hosting services to participating institutions (UNC University Libraries, 2011). More than seventy North Carolina cultural institutions have contributed materials to the NCDHC to date and collaborative digital programs like this create opportunities for these state cultural institutions to work together. As the historical materials within the scope of

the NCDHC mission are not the typical realm of public libraries, their staff may not be familiar with the unique concerns related to the appraisal and description of these materials in preparation for digitization. The most successful digitization projects are those completed by institutions that seek out partners with whom they can share resources and expertise (NC ECHO Project, 2007d). This research study seeks to understand the collective experience of public libraries that have contributed historical materials to the NCDHC project and to determine whether those public libraries engaged in increased collaboration, formal or informal, with other cultural institutions to acquire knowledge and skills that would aid them in the process of selecting and describing materials for submission.

About the North Carolina Digital Heritage Center

In general, cultural institutions like libraries and universities are not structured, organized, or funded in a way that lets them take advantage of the collaborative possibilities that the digital environment provides (Frick, 2011, p. 10). The NCDHC is an attempt to remedy the situation by promoting the sharing of cultural resources in a central digital platform. In order to understand why the NCDHC is well-positioned to promote collaboration and cooperation among cultural institutions, one must first understand the organization of the program and how it operates.

The NCDHC operates in conjunction with the State Library of North Carolina's NC ECHO (North Carolina Exploring Cultural Heritage Online) program, which works with cultural institutions to accomplish its mission of promoting the use of digital technologies to broaden and enhance access to North Carolina's cultural heritage and

history (UNC University Libraries, 2011; NC ECHO Project, n.d.). The NC ECHO program offers education and outreach opportunities, develops and maintains standards and guidelines for digitization, and oversees a grant program that helps cultural institutions across North Carolina to create and promote their digital collections (NC ECHO Project, n.d.). The purpose of the NCDHC is to act as a next step for institutions that are unable to digitize their historical materials themselves. The NCDHC does not spare contributing institutions from all expenses associated with a digitization project, but it does take care of a large portion because the NCHDC uses its own equipment to perform the actual digitization at little to no cost and provide free online hosting services for the digitized materials. The NCDHC receives support from UNC-CH and is funded by the Institute of Museum and Library Services under the provisions of the Library Services and Technology Act (LSTA) (UNC University Libraries, 2011). According to NCDHC staff, the LSTA grant covers staffing and equipment while UNC-CH contributes to the technology infrastructure and administrative costs. The process for contributing cultural and historical materials to the NCHDC is outlined in a document called the Images of North Carolina Contributor's Manual, which the NCDHC provides to each participating institution during initial communications. The following description of the NCDHC is based on the contents of the Contributor's Manual as well as discussion with NCDHC staff.

Once a cultural institution decides to participate with the NCDHC, it agrees to take on certain responsibilities including copyright vetting, selection and description of the materials to be digitized. The Contributor's Manual contains information and guidelines for each of these tasks (North Carolina Digital Heritage Center). In terms of

selection, the Contributor's Manual states that any item relating to or depicting "people, places, or events in North Carolina is eligible for inclusion" (p. 5) and that "[s]election . . . is left to the contributing institutions, who best know what their users would like to see made available online" (p. 5). Beyond this, the only limitations on what contributing institutions may submit are: (1) the materials must be originals that would not be damaged by the digitization process, (2) the contributing institution must own the materials, and (3) the materials must not be subject to any copyright or privacy restrictions (North Carolina Digital Heritage Center). While the NCDHC is open to the possibility of accepting audiovisual and born-digital content in the future, it has only dealt with print materials so far and determination of copyright status for those materials is the responsibility of the contributing institutions. The Contributor's Manual briefly addresses some situations in which copyright restrictions will not apply. This includes materials in the public domain, materials created by a government agency, materials for which the contributing institution is both the owner and the rights holder and materials for which the rights holder has authorized the digitization and online publication (North Carolina Digital Heritage Center). The Contributor's Manual also indicates that all materials published online by the NCDHC must be accompanied by a general copyright/usage statement and provides some examples (North Carolina Digital Heritage Center). If restricted material is posted on the website, the NCDHC policy is that it will be taken down immediately if a complaint is received (North Carolina Digital Heritage Center). According to NCDHC staff, this policy seems to satisfy most of the contributing institutions because they do not have to be as rigorous about determining copyright

status. Even if restricted material is published in error, the NCDHC provides a way to handle the situation.

Once the materials are selected, the originals are transported to the NCDHC facility at UNC-CH where the staff uses specialized equipment to scan all of the materials, which are then saved as TIFF files for use as preservation copies. The NCDHC also currently saves a second copy of each file for the purposes of online presentation; photos and images are saved as JPEG2000 files and text-based materials are saved as PDF files. Contributing institutions can request copies of these files, which are returned on external storage devices (CD-ROMs or USB drives) along with the original analog materials.

Description is the other task left to institutions that submit material to the NCDHC. A contributing institution has two options for creating descriptive metadata for its digital objects. The first option allows the contributing institution to submit a hardcopy template spreadsheet provided by the NCDHC along with its original materials. Appendix A lists the possible metadata elements from this spreadsheet, along with their descriptions. This spreadsheet allows staff at the contributing institution to create an inventory of the materials that includes information about each item, including title, date, and location. More detailed descriptive metadata can also be included but largely this process collects minimal information. The second option allows the institution to submit its original materials without any descriptive information. NCDHC staff will digitize the items and assemble the images into a Google Document spreadsheet that follows the same template as the hardcopy inventory sheet. This way, staff at the contributing institution can access the Google Documents spreadsheet online at a later time to enter

descriptive information about each item. The Contributor's Manual includes a table that lists each metadata field in the spreadsheet along with a brief description and provides examples of a minimum and a full record for reference (North Carolina Digital Heritage Center).

Once the metadata entry is complete, the NCDHC staff imports the scanned images and associated metadata into CONTENTdm, its content management system. Here, NCDHC staff makes final revisions to standardize the supplied metadata so that it conforms to their schema, which maps closely to Dublin Core. The resulting digital materials are available remotely from a centralized website and arranged according to location or material type. The website offers options for browsing the collections by all items, location, item type or recent additions. Keyword searches allow users to sort through the materials. The searches are federated, allowing users to access materials from a variety of cultural institutions at once. The result is thus greater than the sum of the individual parts and users can reap the benefit of this synergy.

Literature Review

Public Libraries and Community Relevance

While many types of cultural institutions contribute to collaborative digital projects like the NCDHC, public libraries have concerns that are distinct from other participating institutions. Public libraries are undergoing a shift in philosophy as they learn to adjust to a world in which digital information and tools are quickly replacing analog information and published materials. The Internet gives people access to a wealth of information in their own homes so they have a wide variety of resources they can turn

to for information. In order to maintain relevance and utility for the communities they depend on for support, public libraries have had to embrace a change in their service philosophy. Public libraries are not simply storehouses of published print materials; they also support their communities by providing access to electronic resources and the Internet, hosting educational and cultural programs for all ages, and offering a variety of other services and programs that both inform and entertain (Bourke, 2007). Yet there are still other ways that public libraries can remain relevant to their local communities. Public libraries must continue to innovate and provide new services to support their communities so that the communities in turn remain invested in the success and perpetuation of the libraries (Bourke, 2005). Public libraries can move beyond helping people find books on the shelves or articles in a database and other traditional ideas of service and focus on how they can help enrich their communities through entertainment and education (Stephens, 2011; Bourke, 2005). The public library can take advantage of opportunities to draw attention to what makes it unique and providing online access to rare local history materials is one way to do this (Stephens, 2011).

The perception of public libraries as cultural institutions is not yet widespread (McCook & Jones, 2002, p. 327). This title is much more commonly associated with museums, historic sites, archives and historical societies. However, it is the mission and service orientation of public libraries that often prompts people to donate their historical materials to them. Public libraries have a long tradition of free and equal access to information and maintaining special collections in public libraries can make it easier for people to get to materials that might otherwise be held in archives or museums (Steen, 2010). Connection to place also plays a large part in why public libraries are often trusted

to act as the custodians of these rare and valuable materials (Steen, 2010). According to Cox (1996), “Understanding local history is basic to individual self-awareness” (p. 7) and this has a great deal to do with community identity. Despite changes in the world with respect to globalization, mass communication, and increased access to information, people still tend to identify closely with their geographic locality (Cox, 1996, p. 3). Public libraries have an opportunity to capitalize on that phenomenon by providing access to local history. In light of this, the success of digital collaboration initiatives that focus on a particular region or locality is unsurprising (Robb & Furl, 2008, p. 10).

Collaboration Among Cultural Institutions

Clearly local history is within the scope of public libraries. Collaboration between public libraries and other cultural institutions has done much to advance this notion. Working with material that borders the missions and expertise of institutions like museums, libraries and archives, these same institutions have an opportunity to work together and these partnerships create opportunities to develop new skills and better serve the community (Steen, 2010; McCook & Jones, 2002). While museums, libraries, and archives have similar missions in terms of education and dissemination of information, they are not identical (McCook & Jones, 2002; Robb & Furl, 2008, p. 10). Each can still learn a great deal from the others because each one takes a different approach in fulfilling its mission (McCook & Jones, 2002; Robb & Furl, 2008). Each type of cultural institution brings its own service traditions and areas of expertise to a digitization project. Museums have traditions of education and outreach, archives focus on preservation and

description of unique materials, and public libraries are concerned with free, open access to information (Tibbo & Lee, 2010).

Depending on the funding, size and function of libraries, archives, and museums, knowledge about the digitization process can vary widely (Allen, 2000). Therefore, digitization projects offer a unique environment in which collaboration and cooperation are likely to occur because of the variety of skills and knowledge required at each stage of the process. Yet according to Manžuch (2011), a study of collaboration among European cultural institutions with respect to digitization initiatives found that these institutions generally did not take advantage of the collaborative opportunities afforded by the project. This phenomenon was attributed to three reasons: (1) an institution had limited heritage collections and lacked interest in the activity, (2) an institution was in the initial stages of its digitization activities, or (3) the institution did not think that collaboration would improve the results of such an activity (Manžuch, 2011). On the other hand, the same study also indicated that cultural institutions preferred to collaborate with other cultural institutions of a similar type or with a similar mission, for example, libraries tended to collaborate with other libraries (Manžuch, 2011). The study also found that libraries were the most active collaborators and tended to collaborate with a larger network or more partners than did other cultural institutions (Manžuch, 2011).

Example Digitization Projects

Not all digitization projects are collaborative in nature. Some public libraries have initiated digitization projects within their own institutions and have been successful, but even these in-house projects do not operate in a vacuum. The Butte-Silver Bow Public

Library (BSBPL) and their Butte Digital Image Project is a prime example. The original project digitized a collection of early 20th century monographs and pamphlets related to Butte, mining, labor, Montana, and Western history and hosted them online through the Montana Memory Project (MMP), a program operated by the Montana State Library (Pierson, 2010). The public response to this project was overwhelming and the Butte Digital Image Project is now collaborating with the World Museum of Mining to provide access to photographs owned by the museum (Pierson, 2010). The museum will digitize the content and upload it to the MMP site and the BSBPL staff will provide access points in the form of catalog records (Pierson, 2010). Crawfordsville District Public Library is another example of more casual collaboration. This public library owned a collection of local history materials that was in danger of permanent loss due to damage, theft, and misplacement (Helling, 2003). According to Helling (2003), the librarians saw digitization as an obvious solution to the problem and they “did their homework by visiting several regional libraries involved in such efforts” (p. 14) before initiating their own project. Even these in-house digitization projects required the project staff to seek information and guidance from outside sources, both formally and informally.

More often, public libraries have contributed to regional or statewide collaborative digitization initiatives in order to capitalize on the opportunity to share resources and save money and staff time. In New Jersey, the State Library and Rutgers University worked together to create the New Jersey Digital Highway (NJDH), a web site that hosts historical and cultural heritage materials from libraries, museums, cultural institutions and even individual owners (Rogers, 2004). Larger NJDH partners had digitization centers installed in-house, but other contributors have the option to send their

materials to Rutgers for digitization or to digitize material themselves using loaned scanning equipment (Rogers, 2004). Rutgers offers digitization training sessions and project organizers offer additional training in metadata and copyright issues (Rogers, 2004). Washington Rural Heritage is a collaborative project that specifically targets small, rural cultural institutions and libraries in the state and assists them with creating sustainable digital collections (Robb & Furl, 2008). The Washington State Library offers training and provides the digitization services and contributing institutions partner with local experts or other institutions to select and describe materials (Robb & Furl, 2008). The Ohio Memory Project is a collaborative effort between the Ohio Historical Society and the State Library of Ohio, which allows cultural institutions all over the state to contribute digital cultural materials (Kupfer, 2010). Initially launched in 2002, this project was reorganized in 2008 in response to funding constraints (Kupfer, 2010). The second iteration emphasizes each partner's unique contributions to the project (Kupfer, 2010). The Ohio Historical Society brings expertise in digitization and content management and the State Library has digitization experience as well as cataloging staff (Kupfer, 2010). The California Local History Digital Resources Project (CLHDRP) is another statewide collaborative digitization project that creates opportunities for contributing institutions to collaborate and cooperate with one another. The CLHDRP project begins each year with a meeting to orient project managers from contributing institutions to the process; this meeting also serves as a forum for discussion and networking among those institutions (Turner, 2006). Over the next several months, project managers are encouraged to attend digitization workshops and other training sessions that will aid them in selecting materials and supplying standardized metadata

(Turner, 2006). The Colorado Digitization Project (CDP) also aims to further the practice of collaboration among Colorado cultural institutions by expanding access to unique primary resource collections (Allen, 2000). The CDP steering committee formed a series of task forces that developed guidelines and documentation in the areas of selection, digitization, metadata, and training (Allen, 2000). The CDP also offers training sessions in digital project management and scanning techniques (Allen, 2000).

Similar initiatives exist in Europe as well. People's Collection Wales is a collaborative digital project that established an all-Wales collection of the people's history and culture using resources from museums, archives and libraries (Tedd, 2011). Several major national bodies are involved in the project, one of which is Culturenet Cymru, a non-profit company that offers a variety of training and outreach services related to copyright, metadata, scanning techniques, web display, and preservation (Tedd, 2011). On a much larger scale, Europeana is an ambitious project to digitize the complete cultural history of the European Union and make it available online (Levack, 2009). Europeana Local is the branch of the project that reaches out to smaller libraries and museums to digitize their content (Levack, 2009). Europeana's leadership hopes to eventually partner with other institutions, potentially in the U.S., which would bring collaboration to a truly international scale (Levack, 2009).

Specific Areas of Collaboration

As evidenced by the examples above, cooperation and collaboration are broad terms that can encompass a wide range of activities and interactions (Adaryukov, 2004). Several projects offered structured educational and networking opportunities for

participants, and such formal collaboration activities can include training sessions, workshops, seminars, webinars, conferences, and forums. For projects that do not offer any structured training sessions to its participating institutions, other opportunities exist. Maroso's (2005) findings of the *Basics and Beyond* program shed some light on what type of formal collaborative activities might be attractive to institutions involved in digitization initiatives. The purpose of this IMLS grant project run by the University of Illinois at Urban-Champaign was to develop digitization training that would be valuable to cultural institutions both in Illinois and across the country (Maroso, 2005). The program offered three different levels of training: (1) a one-day workshop, (2) a three-week online course, and (3) a combination three-week online/two-day in-person intensive workshop (Maroso, 2005). Pre- and post-training quizzes and surveys were administered for each training level and the overwhelming findings reported that while all three sessions were beneficial to attendees, the best training options for staff at cultural institutions are online or short-term one-day workshops located regionally (Maroso, 2005). This is particularly true for smaller institutions with leaner budgets that may not be able to spend money on training or related travel expenses (Maroso, 2005). Moreover, staff at cultural institutions want and need training that fits into a flexible schedule. They have a variety of other responsibilities and duties. Learning a new skill and gaining new knowledge is important but it cannot prevent them from completing their other obligations (Maroso, 2005).

Some of the collaborative digitization projects discussed above encouraged a combination of both formal and informal collaboration. Maroso's (2005) *Basics and Beyond* findings support this as well because each of the three formal training sessions

also provided opportunities for attendees to consult digitization experts and to communicate more casually with each other. These informal opportunities to ask questions, gather information and learn from the experience of others were also seen as valuable by participants. Informal collaboration can also include contacting professionals at other cultural institutions including museums, archives, historic sites, local historical societies, or academic institutions. It can also encompass searching the relevant literature, contacting peer institutions for advice or guidance or making observations at other institutions, contacting experts in certain relevant fields through professional or personal networking, or requesting information or advice through email listservs or weblogs.

Common obstacles to digitization projects include lack of available expertise or training in the areas of digitization techniques, copyright concerns, selection criteria and metadata (Maroso, 2005; Evens & Hautekeete, 2011). This research study focuses on a collaborative digitization project that does not require participants to scan or digitize their own materials; therefore, training with respect to digitization techniques is beyond the scope of this paper. Although copyright is an area in which institutions could benefit from training and collaboration, the intricacies of that subject are also out of scope because the project in this study provides recourse for institutions that inadvertently digitize materials protected by copyright.

In terms of selection and appraisal of primary source materials, the scholarly literature presents a wide variety of theories and criteria (Boles, 2005). While the institutions included in this research study have already made selection and appraisal decisions to acquire the primary source materials; they must still make selection and appraisal decisions about which of those materials will be most valuable to publish

online. In either case, it is important to understand that selection decisions are based on the mission and documentary goals of the institution (Boles, 2005, p. 43). In many cases, public libraries are collecting institutions whose goal is to document the community, but they often have broad latitude in deciding how to accomplish that goal and what aspects of the community to document (Boles, 2005). As there is no single set of rules or principles that dictate how selection decisions should be made, a great deal of subjectivity goes into the selection process (Boles, 2005). Those responsible for selection decisions must evaluate the public library's resources in terms of context, informational content and potential users to make the best possible decisions about what to digitize (Boles, 2005).

Selection covers both physical and intellectual aspects and the physical aspects tend to be easier to evaluate. (NC ECHO Project, 2007a). Many articles concerning digitization projects mention that contributing institutions have prioritized materials that are most fragile, most used, or most rare for digitization. How are selection decisions made beyond those criteria? Public libraries consider a variety of factors when selecting materials to contribute to a collaborative digital project – audience, impact on the institution, intellectual property issues, intellectual control, preservation, and value, to name a few (NC ECHO Project, 2007a).

The audience factor asks contributing institutions to consider who will use the materials, both in the local community and beyond. Will the material reach people that might not otherwise have access (NC ECHO Project, 2007a)? Is there a particular age group that will be most interested in the material? Impact on the library asks contributors to consider whether making this information available online will increase demand for

reference services or other requests. The public library must be prepared for such effects and anticipate those changes (NC ECHO Project, 2007a). Intellectual control addresses whether or not digitizing the materials will improve access to and organization of the materials. Will staff know the collection materials better or will the physical materials be described in more detail or organized more logically after they have been digitized (NC ECHO Project, 2007a)? The intellectual property factor concerns the right to disseminate and replicate the materials or the information contained in them. The public library may own the physical materials, but it may not be legal to reproduce a digital version or share it with the public (NC ECHO Project, 2007a). The preservation factor asks public libraries to evaluate the physical shape of materials and whether the digitization process will damage them in any way, or if it will help save them in the long run by reducing the need for handling. Compared to most other cultural institutions, public libraries are more concerned with providing access to their materials than preserving them (Allen, 2000); however, in some cases a digitization project spurs institutions to pay more attention to the preservation and conservation of the physical materials (NC ECHO Project, 2007a).

Value is arguably the most important selection factor and the one in which public libraries can benefit most from collaboration with other cultural institutions. This factor asks public libraries to consider whether the materials they are digitizing are rare and unique. It also addresses how the collection will be useful in the long term and whether it will satisfy a community or research need. Will the materials provide value as an educational resource? Will the materials increase the prestige of the library or have the potential to attract funding? Another question libraries must ask themselves is whether the materials they have selected will tell the story they want to convey. Are there inherent

biases in the materials they have selected and are they missing important parts of the story? The final question dealing with value concerns description and metadata.

Questions on this point address whether the library has enough information about the object or item to make it worthwhile to add to the digital collection. Another question is whether the library should provide access to certain items if they are not sure exactly what they are or why they are important (Evens & Hautekeete, 2011). Some of these questions may be familiar to public library staff but others may not. With so many questions to consider, public library staff may be overwhelmed about how to select the most appropriate materials for digitization. This is an area in which guidance and advice could prove useful, if not for making specific choices at least for narrowing the pool using consistent selection criteria.

Description of primary source materials is another area where public libraries may lack expertise and turn to other cultural institutions for guidance and advice. Metadata is necessary for the retrieval, identification and organization of digital resources (Evens & Hautekeete, 2011). In order to be accessed by users, digital resources must be associated with information that describes their content, structure, and access parameters. These three types of information are known as descriptive, structural, and administrative metadata, respectively (Evens & Hautekeete, 2011). Furthermore, it is critical that this metadata be maintained in a correct and consistent format, particularly when it is used for a digital product that is collaborative in nature. Users must be able to retrieve *all* of the relevant resources they need regardless of which institution submitted them. This is a problem very specific to public libraries because they typically work with published materials and bibliographic records. For unpublished materials, like unique local history

resources, many public libraries have developed their own local metadata systems that do not conform to any shared standard. Some public libraries do not use any metadata at all and instead they rely on the memory of the employee who has been there the longest and knows the materials from having worked with them, not through any formal system of arrangement or description (Helling, 2003). If public libraries do use standard metadata practices, they may not use those designed for archival or historical materials, instead relying on Library of Congress Subject Headings (LCSH). All of the previously mentioned example collaborative digitization projects require contributing institutions to provide their own metadata. Unfortunately, many institutions do not have staff with the appropriate experience or knowledge to provide adequate metadata for their digitized collection materials or they have the staff but lack the time to do a good job of assigning metadata (Evens & Hautekeete, 2011). Public libraries can work with other cultural institutions to learn how to apply descriptive, structural and administrative metadata to digital historical materials.

Public libraries have an opportunity to provide a new service to their communities by highlighting and providing access to their unique historical materials. Contributing to a collaborative digital project is one way to accomplish this and public libraries that may lack expertise or training in certain areas stand to benefit from the knowledge, skills and experience of other cultural institutions. Public libraries can think of these other institutions as a resource they can refer to in order to ensure that their involvement with the project is a success.

Methodology

The purpose of this study was to understand the collective experience of public libraries that have contributed historical materials to the NCDHC project and to determine whether and how those public libraries engaged in increased collaboration, formal or informal, with other cultural institutions to acquire knowledge and skills that would aid them in the process of selecting and describing materials for submission. For the purposes of this research study, the term “public library” refers to a library or library system located in the state of North Carolina that is maintained for the use of the public, operates using public funds, and has already contributed materials to the NCDHC program (“Public Library,” 2012). A list of all NCDHC contributing institutions is available from their website at www.digitalnc.org; the public libraries involved in this study were taken from that list. The term “materials” refers to unique archival or primary source documents or images owned or held by a public library that relate to the history or culture of the state of North Carolina and are distinct from other print or electronic resources the public library may provide like books, magazines, databases, online journals and e-books which are published and widely available. These unique materials have been digitized and are now available from the NCDHC website along with materials contributed by other cultural institutions in the state of North Carolina.

As the focus of this research study is solely on North Carolina public libraries that contributed to the NCDHC, the scope is very limited. At the time this paper was submitted, seventeen public libraries had contributed materials to the NCDHC. With such a small population size, the findings of this study may be of interest to other public libraries in North Carolina that own historical materials but the results may not be

generalizable to a larger community (Babbie, 2010). Rather than simply quantify the number of public libraries that reported engaging in certain activities, the research methods used in this study are largely qualitative (Babbie, 2010). This type of analysis generally yields richer and more descriptive information because study participants have an opportunity to express their opinions and go into more depth about their motivations and experiences with respect to those activities (Babbie, 2010). Certain relevant data is publicly available from the websites for each public library or from the NCDHC website. Basic information about each contributing public library was obtained from these sources, including whether or not public libraries link to the NCDHC website or provide online access to any historical materials from their own homepages.

The data that is not publicly available was obtained from the employee at each public library who acted as the primary contact or liaison for the NCDHC project. Ten of the seventeen public libraries that contributed materials to the NCDHC were contacted to request participation in the study. Based on discussions with NCDHC staff, the other seven public libraries were excluded at the outset of the research project for one of several reasons. Three public libraries were excluded from the study because they had only minimal involvement with the NCDHC. These three libraries submitted nominations for historical newspaper titles to be digitized and included on the NCDHC website but did not contribute any original materials for digitization. Three more public libraries were excluded from the study because, while they do have original materials available from the DigitalNC website, these materials were not digitized by the NCDHC itself. One of these three public libraries contributed nine city directories; however, these items were digitized prior to the establishment of the NCDHC program and the library simply

allowed the NCDHC to include those city directories on the DigitalNC website. The second public library suggested five local history books for submission but the NCDHC digitized copies of those titles owned by the North Carolina Collection at UNC rather than those belonging to the public library. The third public library was excluded from the study because the photographs it contributed were already available online from the library's home website as a complete digital collection and the NCDHC merely repurposed the collection as a whole for inclusion on the DigitalNC website. Another public library was excluded from the study because the staff member that acted as project liaison to the NCDHC had retired and could not be contacted.

Interviews were determined to be the best way to gather information for the purposes of this study for several reasons. First, the population of inquiry is very limited and interviews tend to elicit a higher response rate than surveys (Babbie, 2010). Further, the small number of participants meant that the researcher had the time to go into more depth with questions than a survey would have allowed (Babbie, 2010). In addition, semi-structured interviews give the researcher flexibility and freedom to ask follow-up questions to probe for further explanation and clarification at the time the information is provided (Babbie, 2010). As the public libraries involved in this study are scattered across the state of North Carolina, in-person interviews would have been prohibitively expensive and time-consuming for the researcher in terms of travel (Babbie, 2010). Therefore, telephone interviews were deemed an attractive alternative because they could be conducted from one location and could easily be rescheduled if either party had a conflict. Telephone interviews were also an attractive alternative because they could easily be audio-recorded for future reference and clarification (Babbie, 2010).

Once the ten public libraries were selected, the NCDHC staff provided the name and email contact information for each of the project liaisons. The researcher then contacted each liaison directly via email to request participation and telephone interviews were scheduled in subsequent email correspondence. The interviews consisted of twenty-three open-ended questions; a copy of the interview questions is available in Appendix B. The questions cover five separate areas of focus, the first of which addresses general information about the public library's involvement with the NCDHC. Questions in this section address the public library's initial awareness of the NCDHC and its services, the general motivations for participation, the scope of the public library's contribution, and the number of staff or volunteers who worked on the project.

The second area of focus addresses whether the public library and its staff had any previous knowledge of or experience with digitization as well as how that experience or knowledge was obtained. These interview questions address whether the public library owns any digitization equipment or completed any digitization projects prior to its involvement with the NCDHC.

The third section focuses on formal and informal collaboration activities with other cultural institutions in connection with the public libraries' submissions to the NCDHC. For the purposes of this research study, the definition of cultural institution includes, but is not limited to, museums, archives, historical societies, libraries (public or academic), and historic sites in the state of North Carolina as well as those outside of the state, or anyone employed by those institutions. The term cultural institutions also includes the NCDHC, the NC Humanities Council, the NC Department of Cultural Resources, the State Library of North Carolina, the North Carolina Library Association,

the NC ECHO program, the NC Preservation Consortium, the NC Arts Council, and any other government entity, non-profit organization or grant-funded program whose mission involves the promotion or preservation of the history or cultural heritage of North Carolina. These interview questions address any formal training that staff attended in preparation for contributing to the project, and any informal information-seeking activities staff used to gain knowledge and skills in preparation for contributing to the project. For the purposes of this research study, collaboration refers to instruction, advice, information or guidance sought or received by project staff from sources outside their own institution in an effort to gain knowledge, skills or experience in order to inform the process of contributing materials to the NCDHC. A public library is considered to have engaged in formal collaboration if staff reported attending structured events such as conferences, workshops, forums, seminars, webinars, or other instructional or informational training sessions that were hosted or sponsored by cultural institutions. A public library is considered to have engaged in informal collaboration if staff reported engaging in unstructured information seeking activities including informal communication or meetings with staff at other cultural institutions, reviewing websites or literature produced or suggested by other cultural institutions, or observing the practices of other cultural institutions with respect to digitization.

The fourth area of inquiry addresses how the public library selected and described its submissions to the NCDHC. Questions in this section cover what criteria were used to make selection decisions, what audiences were considered and the extent and type of metadata that was associated with the materials that were submitted.

The fifth and final area of inquiry deals with how the public library evaluated and assessed its involvement with the NCDHC. Questions in this section address whether public libraries received offers of materials or information from the community after digitizing their materials, whether use of the digitized materials has changed or increased, and how the public library has promoted its project with the NCDHC. Questions in this section also address how the public library benefited from its involvement with the NCDHC; the experiences, both positive and negative, of the public library during their participation; and any future plans with respect to digitization projects or activities.

Results

The telephone interviews were conducted during the month of February 2012. Of the ten public libraries contacted for participation in the research study, nine completed interviews and one declined to participate due to time constraints. These semi-structured telephone interviews lasted approximately one hour on average and were audio-recorded with the consent of the participants. Some of the questions lent themselves to yes or no answers and in those instances; the number of responses is given. For the more complex answers, illustrative quotes are provided as evidence of how each public library responded.

Public libraries first became aware of the NCDHC and its services in a variety of ways. Two of the public libraries were initially approached by the NCDHC about potential contributions. The first was contacted directly by NCDHC staff early on about the possibility of a pilot project and decided to get involved shortly thereafter. The other

opted to contribute materials after receiving an email request for submissions that the NCDHC sent out via a public library listserv.

One public library had applied to the State Library of North Carolina for an LSTA grant to start a digitization project in-house around the same time that the NCDHC was getting started:

When the state library got my application and looked at the size of my project, they said this is precisely the kind of project that the digital heritage center is looking for and suggested that I contact [the NCDHC] staff.

The remaining six public libraries discovered the NCDHC through other means. Two interviewees first learned of the NCDHC and its services through promotional events or presentations sponsored by the State Library of North Carolina. One interviewee attended a meeting of the North Carolina Public Library Directors Association, where the NCDHC staff had given a presentation. Three public libraries first became aware of the NCDHC through word-of-mouth because a member of their staff was already familiar with its existence and activities.

After finding out about the NCDHC project and its services, these public libraries then approached the NCDHC with materials or collections they wanted to digitize and some were anxious to get involved quickly. One interviewee said, “we had to strike while the iron was hot” and another added “we wanted to jump on the bandwagon before the schedule might be so full that we might not be able to take advantage of the opportunity.”

Another interviewee had this to say:

When [we] found out about the digital heritage center it was like, well this is a no-brainer. Not only did we get somebody to scan the stuff for us, but we also got them to host it, too. It was a win-win situation.

Other interviewees echoed this sentiment:

When we did hear about the scope of the NCDHC it was pretty much like a dream come true that, for no expense on our part, we could have our images available for the world to see and for the neighborhood and for [the county] to see these unique items that were in our possession and we didn't even know about.

The motivations for contributing to the NCDHC were a mixed bag for the public libraries and most of them had more than one. One interviewee indicated that her library was interested in staying up-to-date with current trends. She said, "Our director was into new technologies and staying up on current things and saw that a lot of libraries were doing these types of digital projects." Another stated that it was more of an experimental undertaking and said, "It was my responsibility to help decide what to do with the materials . . . and I was looking for a good first digital project." Another interviewee wanted to get involved because "being a public library with this huge collection and not knowing really what to do with it, we needed expertise outside of what we had."

Providing better access to materials was another common motivation for public libraries to get involved with the NCDHC project. Seven of the nine public libraries indicated that providing better access was an important goal in contributing materials to the NCDHC (see Figure 1). One interviewee explained, "From the very beginning, my purpose was to tell the history of [the county] digitally" and "to make the community aware of these wonderful resources that we have here." Another interviewee added that the ultimate goal was to provide access to historical materials because "that's what libraries are for."

On the other hand, two public libraries indicated that a primary motivation for getting involved with the NCDHC was to preserve fragile or valuable materials (see Figure 1). Of the NCDHC, one interviewee said, "They rescued these materials, these items . . . they aided us in the preservation." Another interviewee used the NCDHC's

services as a way to handle what he referred to as “problem materials.” This included some oversized scrapbooks and maps that were fragile and too large to be digitized with basic scanning equipment. Allowing patrons to use the originals posed a danger because the more the originals are handled, the more at risk they are for loss, theft or damage from general wear and tear. Digitization allowed the public library to provide access to the information without further endangering the original materials.

Primary Motivation for Contributing Materials to the NCDHC	
Response	Number of Public Libraries
Access to Materials	7
Preservation of Materials	2

Figure 1. Public libraries’ primary motivation for contributing materials to the NCDHC program (Responses to Interview Question 2).

All of the public libraries, while recognizing that either access or preservation was paramount, also recognized that the two are not mutually exclusive. Both of the public libraries that were more interested in preservation wanted to digitize their materials to protect the fragile originals while still being able to provide access. Therefore, the paramount motivation was preservation but access was also seen as an added benefit. As one interviewee put it:

It is hard to say which is more important. Certainly the preservation, but because of and in our attempts to preserve the physical materials, access was certainly the other positive. . . I would have to say that preservation was certainly the overriding issue, quickly followed by access.

Another interviewee said, “We’re not a museum. If people can’t view these materials, what good are they? Granted it’s archives, but at the same time they should be accessible.” He went on to say, “We wanted to have these materials accessible in such a

way that anybody could look at it but the materials also could be kept preserved and kept from being lost. I'd say it was fifty-fifty, really."

All seven public libraries that indicated access as the primary motivation for their involvement also mentioned that preservation was a bonus. As one interviewee put it, "Obviously for a public library, access is always the primary concern, the keyword being public [but] it's a delicate balancing act there." Another said, "We will continue to always be concerned and mindful regarding preservation but the goal is to make the resources available to people. They have no value if they cannot be used." Another interviewee stated, "We already had an effort underway for the preservation piece of [the project]. We were already investing in the archival materials in order to better take care of those assets but the digitization project definitely was access-oriented."

When asked to describe the scope of its project with the NCDHC, each public library mentioned specific materials that it wanted to publish online. For one, it was a collection of memorabilia documenting the history of local World War II veterans. For another, it was materials related to the history of the African-American experience in the county. One project focused on materials related to the urban development and renewal of the community. Three of the public libraries mentioned collections of photographs or negatives related to local history. Other projects involved a series of glass plate images, a set of tax books, and a collection of oversized maps and scrapbooks.

Only one public library contact had sole responsibility for her library's digital project. The remaining eight public libraries indicated that more than one person was involved in the project at various stages. Five of the remaining eight public library project liaisons had assistance from one other person and the other three had assistance from two

or more people. Others who were mentioned as having assisted with the digitization project in some capacity ran the gamut and included library administrators or directors, librarians or other professional staff, paraprofessionals, student interns, volunteers, or some combination thereof.

Only one of the public libraries does not own any digitization equipment at all. The other eight indicated that their institutions do own at least some basic digitization equipment (see Figure 2). Low-grade flatbed scanners were mentioned most frequently and two interviewees specifically mentioned other equipment like a drum scanner, a high-quality flatbed scanner, and a digital scanner/microfilm reader. All eight of the public libraries that own digitization equipment indicated that it is generally used to complete one-time requests from patrons for digital copies of photographs, documents, or newspaper clippings. As one interviewee explained:

We get research requests all the time from all over the country asking can you send me an obituary, can you send me what you have in your files on this person. So we pull all of those paper copies that we have on file and we scan them and we email them out.

In-House Ownership of Digitization Equipment by Public Libraries	
Response	Number of Public Libraries
Yes, Please Describe	8
No	1

Figure 2. In-house ownership of digitization equipment as reported by public library contacts (Responses to Interview Question 4).

In five public libraries, the digitization equipment has also been used at one time or another for small-scale in-house digitization projects, usually for photographs. One public library that had used its flatbed scanner to digitize such a collection indicated that it had been a slow and cumbersome process. As he said “We don’t really have very much

capability here unfortunately. [The digitization] took some time because the scanner I have is not exactly fast, either.” Using this type of equipment for even a small in-house digitization project can be time-consuming and the quality of the resulting product is often not worth the effort. As one interviewee pointed out, “our scans are disappointing compared to the work that the digital [heritage] center is doing.” It is interesting to note here that several other interviewees described their digitization equipment as less than satisfactory. One responded that although his public library did own digitization equipment, it was “nothing more than just your typical scanner” and another said “It’s a little low-grade but we have a scanner.” In fact, when asked whether his institution owned any digitization equipment, one interviewee responded “No, not really” but then went on to describe the library’s equipment, saying, “We have a couple flatbed scanners.”

Four public libraries indicated that they had not previously been involved in any digitization projects and that their contribution to the NCDHC was their first experience. The remaining five public libraries reported that they had previously engaged in small-scale in-house digitization projects and four of the five currently host some of those digitized materials on their library’s home website (see Figure 3). Two public libraries had completed more than one digitization project in the past. One of those two public libraries had worked on multiple digitization projects in-house and the other had been involved in other larger digital projects of a collaborative nature. The interviewee involved with those projects made a point to say that the library had “been the primary mover on all these [digital projects], even though a couple of them were collaborations with other people.”

Involvement by Public Libraries in Any Prior Digitization Project(s)	
Response	Number of Public Libraries
Yes, Please Describe	5
No	4

Figure 3. Involvement by public libraries in any digitization project(s) prior to their involvement with NCDHC digitization project (Responses to Interview Question 5).

Seven of the nine public libraries had some prior digitization experience or knowledge and were able to apply that to their projects with the NCDHC. Only two public library contacts said that none of their staff had any previous digitization experience or knowledge (see Figure 4). In response to the question, one interviewee replied “Zero! We were neophytes, I didn’t have a clue what metadata was, that was all new to me, and no one else on the staff had any experience either.” One public library contact admitted, “I knew nothing about how you digitized something and cataloged it and defined the facets and the access points that would guide people to it.” One interviewee, when asked to describe the extent of digitization experience in his institution, said it was “very rudimentary.” Another interviewee initially said that none of her staff had any knowledge about digitization but did go on to say that some of the employees were aware of the strong need for knowledge about digital resources and had read up on the subject.

Previous Knowledge of or Experience with Digitization in Public Libraries	
Response	Number of Public Libraries
Yes, Please Describe	7
No	2

Figure 4. Previous knowledge of or experience with digitization as reported by public library contacts (Responses to Interview Questions 6, 7 and 8).

The other seven interviewees had at least one staff member with knowledge of or previous digitization experience; however, the extent of that knowledge and the sources of previous experience varied widely. Some prior experience and knowledge was obtained more informally. One interviewee explained that he was self-taught:

What I learned about it, I did it on my own because I was just interested. I had educated myself on all the processes. I have to admit it was a bit scattershot . . . but I learned about archival scanning from reading.

Other interviewees also reported that they engaged in informal means of gathering experience and knowledge about digitization. One public library contact indicated that at a previous job, she “read several articles for evaluation of content management software” and was on “several different [email] listservs like Society of American Archivists and would ask questions on there.” She also consulted with other professionals in the area, especially those at the local university. Several interviewees reached out to other institutions in the past for guidance. One interviewee said that her library “initially contacted UNC” in deciding what to do about digitizing a large collection of photographs and another said “probably once or twice I have called NC ECHO in the past.”

A few interviewees specifically indicated that they or their staff had gained their previous digitization knowledge by virtue of on-the-job training. One public library indicated that it “had one staff member who through activities with the NCLA has worked with colleagues in other projects or endeavors outside of our library” and has “also has worked with colleagues on a contract basis on her own . . . to do some of the practical technical work associated with projects that have had a digital result.” One interviewee also “had a lot of student jobs involved with digitization.” Another interviewee explained that the public library’s technology coordinator “has just been

learning on the job and talking to people and networking . . . it was just a growing process, with her and with me.”

Other interviewees indicated that they or their staff had knowledge of or experience with digitization by way of formal training or education. Only one interviewee had an educational background in a related field. She had completed a Master’s in Library Science (MLS) program with a concentration in Archives and Records Management and “took classes that dealt with digitization, EAD, and different metadata types for digital objects.” Another public library contact indicated that “there is a group of librarians, the digital library staff, and they’re familiar with the technology [but] I think the learning curve for all of us is cataloging and access features.”

Other public libraries indicated that they or their staff acquired knowledge and experience with digitization primarily through continuing education programs like webinars, workshops, and conferences. One interviewee stated that she completed a “work at your own pace, continuing education credit web class on doing digitization projects.” Another interviewee had this to say:

I did do a couple of webinars that were very helpful and I learned a lot from them and kept all the notes. What I was particularly interested in was the preservation of images and their degradation depending on how many times they’re scanned.

One interviewee said, “I have been to many workshops, I attended the NC ECHO Digitization Institute when they first started that up and a couple of the NC ECHO workshops and things.” Another interviewee said:

One of the early things I did was the state offered week-long digitization workshops – it might have been part of NC ECHO . . . They did a really good job of giving us the basics – some standards to scan at, the technical details, actually how to digitize. So that really got my feet on the ground and then it was just a matter of learning by experience from then on.

She went on to say that, after attending the workshop, she often referred back to the documentation provided by NC ECHO and the information on their website. She said, “That was a main source if I couldn’t remember something.”

Only three of the nine public library contacts interviewed reported attending any formal training specifically in preparation for the NCDHC project (see Figure 5). One interviewee recalled that he attended a presentation that was hosted by the State Library of North Carolina. Another interviewee attended a digitization workshop as part of the North Carolina Library Association (NCLA) conference and had this to say about it:

I just went to NCLA where they did a workshop or presentation and other libraries spoke [about] projects they had done and that’s where I got a bit of Dublin Core and other things that I’d really never focused on. I just got a chance to see how other library systems were approaching it and what they were getting out of it.

The third interviewee stated that:

For a year leading up to the project, I had gone to a couple of workshops. NC ECHO offered a couple of workshops, when I went to the NCLA conference I attended a couple of sessions related to digitization and then I think that there might have been one other day-long workshop but yes, I did have some workshop education under my belt.

Formal Collaboration in Preparation for NCDHC Contribution	
Response	Number of Public Libraries
Yes, Please Describe and Explain Why	3
No, Please Explain Why Not	6

Figure 5. Reports of formal collaboration activities in preparation for contributing materials to the NCDHC program (Responses to Interview Questions 9, 11 and 12).

All three public library contacts that attended formal training sessions wanted to gain a general understanding about the digitization process. One indicated that she attended to gain a better understanding of the general issues related to digitization and that she “did not understand how to build the cataloging required” and “just needed to try

to understand some of the vocabulary.” Another interviewee stated that her goal in attending the workshop was “really a general understanding” of digitization. She added:

[The workshop] talked about digitization projects and how to decide on the scope of the project and what you were going to digitize and all of the things you had to consider, like the underlying database and the metadata and it was really just examining the project components and giving you some background in terms of making those decisions.

Five of the remaining six institutions responded that they or their staff had either not participated in any formal training; the sixth was unsure but her “inclination was that they had not.” The institutions whose staff had not participated in any formal training in preparation for the NCDHC project offered several explanations. One stated that there was “simply no need, [the NCDHC] took care of it.” Another described how straightforward the process was, saying “We just followed instructions to submit those items that were accepted.” As one interviewee explained, “When I was hired they specifically wanted someone who had experience with archives and digitization so I didn’t do anything special.” Another interviewee said “No, I just knew what needed to be done . . . I know the subject and I know this collection here and I knew what I felt was top priority.”

Three of the nine public library contacts indicated seeking informal assistance to help them with their contributions to the NCDHC but interestingly, they were not the same three that attended formal training in preparation for the NCDHC project (see Figure 6). One interviewee had this to say:

Along the way, I consulted with a couple of local history librarians in this area. To be honest, for the most part, I sort of made it up as I went . . . I’d pick up on an idea and I’d call somebody and say ‘Is this a bad idea?’ or ‘How should I go about this?’

Another public library contact knew that the previous library director, who was very involved with the project, used “lots of outside sources” and had reached out to some of the history faculty at the local university in preparation for the NCDHC project.

Another public library contact, when asked if she had reached out to other professionals in the field said “A little. I do have colleagues at nearby libraries. I work very closely with the local history and genealogy librarian there and so when we did start working with the digital heritage center I made her aware of it.”

Informal Collaboration in Preparation for NCDHC Contribution	
Response	Number of Public Libraries
Yes, Please Describe and Explain Why	3
No, Please Explain Why Not	6

Figure 6. Reports of informal collaboration activities in preparation for contributing materials to the NCDHC program (Responses to Interview Questions 10, 11 and 12).

The six public libraries that did not seek information in informal ways cited similar reasons for not having attending any structured training sessions on digitization.

One interviewee explained it this way:

In many ways, the bigger question is what to digitize. Of course, I have learned over time here what people are interested in and what I think will be important to get online [but] there aren’t many other people who can advise me on that.

Another stated “I pretty much already had the base knowledge. I understood how these projects work, I’d been on the scanning end, I’d been on the content management end, so I really didn’t reach out very much.” One interviewee indicated that her staff member in charge of assigning descriptive metadata “just followed the instructions he received from [the NCDHC staff].” Another stated that she did not feel the need to reach out to others for guidance, saying “Once I got introduced to the digital heritage center, [the staff] sort of became my teacher. They blew me away, the level of support they provided was just

wonderful.” Another interviewee said “[The NCDHC staff] was helpful . . . as far as the images that I sent to the heritage center and as far as the format and certainly things like metadata.” One interviewee summed it up nicely saying, “No, we didn’t. We thought we’d hit the jackpot.”

The criteria used by the public libraries in selecting materials to contribute to the NCDHC project varied widely. The most frequently cited selection factor was rare or unique material that would be of most interest to the local community. One interviewee tried to select “really interesting stuff. Something I think people would find fascinating” and “anything that documents the history of [the county].” Another based selection decisions on “things that were unique to our library” and “what would interest people, what would they be able to get value out of.” The same interviewee also indicated that she “wanted materials that there would be some use for the content.” One interview, in explaining her public library’s selection criteria explained:

We looked for unique items; things that we suspected were not available elsewhere. We sincerely believed we had possibly the last surviving copy of certain things and we thought that this would be the only access point to it.

She went on to say she “was thinking that the community could see themselves reflected in these documents and it just brought that whole area back to life, celebrating the county, we were focused on that neighborhood.”

Several public libraries selected fragile or damaged materials in danger of loss for digitization, even those that indicated their chief motivation for participating with the NCDHC project was access as opposed to preservation. When asked if her selection decisions were based on preserving fragile or damaged materials, one interviewee responded:

To a certain degree...I was scared to do it truthfully but I took some really, really precious things with me to [the NCDHC facility in] Chapel Hill and a couple of them, in fact, I took and waited while they scanned and brought them back immediately.

Another interviewee said:

We had been accumulating a list of items or resources that we knew needed attention to begin with [because] ours has always been a priority list that takes into consideration both condition for preservation purposes and then how frequently or how readily we need to have the resource or resources available to the public.

Another public library encountered a similar situation with regard to its valuable collection of glass plate photographs and indicated that preserving original material in danger of loss was a critical when it came to selecting those items for digitization.

Some public library contacts also mentioned that they chose frequently requested materials for digitization, regardless of content. One interviewee had this to say:

When you know that you have resources that have been requested and in some cases have been in demand if even for a short period of time, then you know you've got an item that's significant enough hopefully to make it more broadly available.

Another said "being requested was certainly a part of it . . . that's partly how I know how important they are.

Conversely, based on the nature of the materials they contributed to the NCDHC, other public libraries were not able to base selection decisions on frequently requested materials. One interviewee explained:

No, it wasn't a matter of putting stuff online that I'd already been getting a lot of requests for because I think, in the cases of most of my things, people didn't even know we had them.

Another responded in a similar fashion, saying for them it was "maybe just the opposite, no one knew what was in there since we didn't have any access points to it."

None of the interviewees specifically identified academic research purposes or classroom use as a selection criteria, although some mentioned that it was incidental. One interviewee said “students and future generations were brought up” in discussions regarding selection decisions but that it was not a primary concern. Another interviewee added, “I did not make that a high priority. I haven’t worked with the local schools as I should on this type of thing.” With respect to educational purposes, another public library contact said:

I think the resources that we have are underutilized by [teachers]. Part of our frustration and certainly a regret is that I don’t think that our teachers . . . [know] what library resources are available.

None of the interviewees indicated that the NCDHC had requested any specific materials. One interviewee said, “They took what we would give them. . . [The NCDHC] wasn’t exactly too specific but I think [they] just used my judgment in terms of what I thought was significant.” Another interviewee confirmed this, saying “They asked me what I would want to have digitized and they agreed with my assessment.”

When the public libraries indicated that they had an audience in mind for the materials they selected for digitization, it was largely local historians, genealogists, and any member of the general public with an interest in local history or family research. As one interviewee explained:

It’s part of our mission statement, we do try to get things that would be of interest to the general public but we do service genealogists and historians so we look for things that would hit all of those categories...we try to cover all of our bases.

Other interviewees responded similarly, saying “our main clientele for these collections in-house for people doing research for genealogy and for local history for our area so that

was a deciding factor.” Another added “we certainly get researchers from across the state and across the country, but my main thinking was local.”

When pressed further about whether other groups or functions played into decisions about selection, several interviewees mentioned that students and academic researchers were a secondary consideration. One interviewee explained:

My first thought was general interest and general researchers but my close second was students because I know the students have a course not only on state history but also on their county history and I thought the kids would really enjoy visually seeing things related to the county history.

While all of the public libraries were able to indicate an intended audience for their materials, some were also curious about potential users they had not anticipated. As one interviewee put it, “We were excited to think about who might stumble upon it” and “since we’d never done a digitization project [we wanted] to wait and see who might find it interesting.” Another added, “it remains to be seen how this information will really be of interest . . . that’s the fun of it really.”

Largely, the public libraries indicated that there was little or no metadata associated with the materials they contributed to the NCDHC, as shown in Figure 7. One interviewee indicated that the scrapbooks his public library contributed to the NCDHC project were found in the bottom of a closet in the library building and had probably been long forgotten. Of the scrapbooks, the interviewee said “They weren’t even cataloged . . . it’s one of those things we had not gotten around to.” Another public library contributed a collection of photographs that had previously been in the possession of the local history society. The photographs had been stored in a box without any real sense of organization and “carried with them just very limited information. A site might be identified and there may or may not be a date as to when the photograph was made.” One interviewee

described her library's materials as having been organized into file folders that were labeled with certain geographic or subject headings and were further arranged in order of relevance to the city and county so "the librarian had been in there and done some categorization." In describing the metadata for this collection, the public library contact said:

We had very little to work with. At times, once [the NCDHC] got the materials, they found things written on the backs of photographs and they graciously included that. I think a lot of the work is ahead of us to find resources to go back in [and insert more metadata].

Another said:

[The photographer] had made notations on the envelope of each negative and we have also solicited input from our community about the images. For the other materials, it varied, but I usually had some provenance information about who had donated it, perhaps the significance to local families.

Another interviewee had this to say when asked whether there was any metadata associated with his library's materials:

Yes and no. We had things organized in our photographic archives by subject matter [so] I knew exactly what I could get from where. Now, as far as formal metadata was concerned, we really did that as we went. It sounds a little disorganized but we just jumped in with both feet and did it as hard as we could.

Formal Metadata Associated with Digitized Materials	
Response	Number of Public Libraries
Yes, Please Describe	1
No	8

Figure 7. Existence of formal metadata associated with the materials submitted to the NCDHC for digitization (Responses to Interview Question 15).

Only one of the public libraries had more formal metadata associated with the materials it contributed to the NCDHC; it had a finding aid for the collection materials and catalog records for the newspapers (see Figure 7). For the other eight public libraries,

publishing the materials online greatly improved accessibility and intellectual control because even the minimal description required by the NCDHC was more than what was previously available in most cases. Several respondents indicated that gathering and providing this information was the most time-consuming part of the project, but it is also arguably the most important part because it is what allows users to find the materials online.

Seven of the nine public libraries indicated that they had done some form of promotion or advertisement of their involvement or contributions to the NCDHC and most focused on promoting their participation at the beginning of the project (see Figure 8). As one interviewee said, “We really had a thrust when we first started getting involved . . . it’s created a whole lot of interest in it.” Another said “We did a big push to get the word out about that. We’ve definitely tried to let the community know that these things are available.”

Promotion/Advertisement of the Public Library’s Project with the NCDHC	
Response	Number of Public Libraries
Yes, Please Describe	7
No	2

Figure 8. Promotional activities or advertisement of the NCDHC project as reported by public library contacts (Responses to Interview Question 16).

The most ambitious public libraries have pursued several avenues of promotion. One library has hosted a program in the library about the newspapers it contributed to the NCHDC. Of the program, the interviewee said “we had a huge turnout” and “that was wonderful advertisement.” The same public library has also published press releases and articles in the local newspaper, and placed notices and advertisements on its home library

website about the NCDHC project. The interviewee also added that “just recently, there’s a Saturday morning radio program and we were interviewed for that.”

Other public libraries have been less active with promotion but have still taken pains to advertise their projects with the NCDHC. One interviewee said that, after completing renovations on one of its branch libraries, they “highlighted it at the reopening . . . and several people in the community were really impressed and touched because they didn’t know this [collection] existed, it was a surprise. It was very fun to see the reaction.” Another public library contact said “I have not made any promotional materials for DigitalNC in-house” but she did say that her public library made sure to link to the NCDHC website from their home website and that the library put brochures created by UNC-CH about the NCDHC project out for their patrons to look at.

Several of the libraries that have promoted their projects with the NCDHC indicated that they would like to do more to increase awareness about their involvement. As one interviewee stated:

I haven’t systematically marketed it . . . When [the project] first launched, we put some articles in the newspaper and the local historical association announced the launch of the site and that kind of stuff but we haven’t done much since then truthfully.

Another interviewee had this to say about promotion and advertisement:

Marketing and promo plays a real part. We have a really good relationship with our local newspaper so we have a regular weekly column in the newspaper and several columns have been on the digital heritage center and the resources that we were fortunate enough to have accepted and digitized.

The same interviewee went on to say, “I think that our promo needs to be broader than that.”

The two interviewees who indicated that their libraries have not done any promotion of their involvement with the NCDHC indicated that they intend to do so in the future and they see how it could benefit the library itself. As one interviewee admitted, “We haven’t done that and that would be a very good thing for us to do. We should do that.”

After contributing materials to the NCDHC, six of the public libraries reported that individuals within the local community found ways to contribute to the project, either by offering privately owned materials for digitization as a contribution to the collection or by providing information that helped to identify or describe the materials that were contributed to the NCDHC project (see Figure 9). One interviewee said:

I’ve had several individuals who have photographs . . . ask if I would be interested in adding these things so I’ve taken in a lot of old photographs that people have brought by. The community has bought into this project to a large extent as well.

Another interviewee had this to add:

We had some of that going on at the time the project was underway because we would put an old photograph into the paper periodically just saying [the NCDHC] project was underway and if you have old family photographs or other documents that you think would be of interest, please bring them to the library and we can scan them and return them to you immediately. So we sort of put a public appeal out there from time to time and we did get some response, we got some nice things in.

Another interviewee said that in her library, materials were “definitely coming in constantly” but she also attributed this to the fact that her institution is still advertising the project.

Another interviewee provided an example of how he was contacted by a member of the community with information about a photograph of a reunion of Confederate (Civil

War) veterans the public library had contributed to the NCDHC project. About the experience, the interviewee explained:

After I had digitized that image, somebody came to me and said ‘I know the names of every person in this picture. . . I have the names in my files because I have a copy of that picture’. So yeah, things like that did happen, every so often. Certainly not every day but we did get things like that.

When asked if it had received information from individuals who had seen the materials online, another public library said “One person. They called and said they recognized someone in a picture and could they have a copy.” Another interviewee said:

At one point I did get an email from somebody saying ‘I found my great-great grandfather in your collection’ and then he gave me a couple of sentences of information on him so I did have that happen once or twice.

Offers of Information and/or Materials from the Local Community	
Response	Number of Public Libraries
Yes (Information and/or Materials), Please Describe	6
No (Neither Information nor Materials)	3

Figure 9. Reports by public library contacts as having received contributions to the NCDHC project in the form of offers of information and/or materials from members of the local community (Responses to Interview Question 17).

Interestingly, one public library received an inquiry from a member of the community that had found materials related to their own family history online and was upset by it. The interviewee had this to say about it: “Among the general public, there is a reticence about . . . having things on the internet. We’ve had some people come in and say ‘Oh here’s a picture of my ancestors, how did you get this?’” The librarian had to explain to the person that the library legally obtained the image from its owner, who was also a descendant of the person in the photograph.

Two public libraries that received offers of materials or information from members of the public were unable to say whether that was a result of having contributed

to the NCDHC project. One interviewee received offers of material from the community but perhaps “not specifically because of the NC Digital Heritage Center.” Another interviewee explained “I’m not sure sometimes if DigitalNC is what’s sparking an increase or not. I guess I would say not a big increase.” She went on to say that the library has no way of knowing whether people have found the information on the NCDHC website unless the person specifically mentions it. It is important to note that both of these public libraries also link to materials they have digitized in-house from their home website, so members of the public can access to those materials from two different places.

Three of the nine public libraries have not received offers of either materials or information from the community but they are excited about the possibility (see Figure 9). One interviewee said, “No, I have not had anybody offer materials although that would be really cool.” In several cases, the public libraries that have not had much of a response from the community were able to provide some possible explanations. One interviewee attributed this to the nature of the materials her library contributed to the NCDHC. She described them as “very straightforward” and “well explained.” As opposed to photographs or images, these text documents already contain a great deal of information and do not lend themselves to further description. She went on to say “I’ve had people comment on it [and say] ‘I’m thrilled the [newspaper] is online and I’ve used it for this and this and this.’ I’ve gotten positive comments but not comments that help add to the body of information.”

Two other public libraries cited the fact that their materials had only recently become available through the NCDHC website. One said that “our materials really

haven't been up that long" and another explained that "Everything got finalized not that long ago so I just think they haven't really had a chance to be up there and we haven't had a chance to promote them." These public libraries also had not done a great deal to promote their project with the NCDHC and thought that may have played into why people had not contributed to the project. As one interviewee explained, "Eventually we are going to link to the digital heritage website but we haven't done much to promote the knowledge that our stuff is on it." Another said, after explaining that they did not promote the project, "common sense tells me that we should publicize this."

Most of the public libraries did not notice a drastic change or increase in use of the materials that were digitized through the NCDHC. One interviewee said that he had noticed a change "in perhaps subtle ways, I can't really pinpoint anything very specific." Another said "It's not like a tidal wave increase or anything like that but I have had several inquiries . . . not huge numbers yet but I think folks are starting to discover it." One interviewee recognized that, even without examples or evidence to show that use had increased or changed, "there was virtually no access to the material before we put it online. Access has increased 100% for anyone who is online and looks on the website."

A few public libraries; however, were able to provide concrete examples as evidence of how use of their materials had changed or increased since being made available online. One public library said, "Since we put the material up we've been contacted by one textbook manufacturer asking for permission to use one of the pictures in a textbook and another museum in Atlanta wished to use an image in a display so it's been really interesting." Similarly, one interviewee said this:

Occasionally we do get calls from people who are compiling a family history or they are working toward publication of some body of work that relates to [county]

history and so they find our [digital materials online] and call me to get permission to use the image for commercial purposes because they are going to publish. I knew that that was a possibility as well so one of the things we had to do was establish a policy for what we were going to charge for producing digital images that belonged to us that we knew folks were going to use for commercial purposes.

Another public library, since posting its materials online through the NCDHC, has been contacted about displaying some of those materials in local exhibit spaces. Another interviewee said:

It has certainly increased the awareness and the access, which is what we wanted. We've had people find the materials on the DigitalNC site and contact us wanting to know if we had similar materials, more materials, could they see the original, things like that.

The public libraries that had not noticed a change or increase in the use of their materials after digitization mentioned again that more and better publicity about the NCDHC and its contributing institutions would help. As one interviewee stated, "It hasn't been up that long . . . I think that the publicity is a real key, I think that would spark something."

While public libraries may not have been able to say definitively whether use of the materials changed or increased overall, several mentioned that they had been contacted by members of the community with positive feedback about the materials they discovered online. One interviewee said, "I've had several phone calls saying I just went out and looked at this and it's really nice." Another said "I've had nothing but positive feedback from folks that have visited the site and have seen our stuff . . . I've had absolutely no negative feedback from anyone."

Six of the public libraries interviewed link to the NCDHC website from their library's home website (see Figure 10). The remaining three public libraries do not link to

the NCDHC website so they are unable to track web statistics that way, although one interviewee did say that a link to the NCDHC website from their home site was “in the works.”

Link to NCDHC Website from Public Library’s Home Website	
Response	Number of Public Libraries
Yes	6
No	3

Figure 10. Public libraries that link to the NCDHC website from their home website (Responses to Interview Question 19).

Of the six public libraries that do link to the NCDHC website, only one interviewee indicated that she uses or reviews the web traffic information at all. This public library links to both the NCDHC website and the NC ECHO website and the interviewee said “I get web stats every month and I include those in my monthly report . . . I know they’re being used, they’re not the top sites, but they’re certainly used.” The other five public libraries, although they might be able to access to that information, do not use it or review it for any purpose. One interviewee said, “I am not sure if we are tracking or if we have the capacity to track people who click on those links” and another interviewee said “I would love to know how many times people are going to our DigitalNC site but I don’t know.” A few public libraries that have the capability to track the statistics but do not use them did mention that they could see potential uses for the information, to demonstrate that the service is used and to justify funding for the project in the future.

When asked how participation with the NCDHC benefited the public libraries, the interviewees had a great deal to say and all of them were very clear that the experience was a positive one. The individual answers varied but the overwhelming response was

that there were great advantages for the public libraries that have contributed materials to the NCDHC.

Several interviewees indicated that one advantage of having contributed to the NCDHC was that the experience provided valuable knowledge for the staff. One interviewee said:

This project has certainly opened the door. It was a good introduction for the staff here to realize the significance of digitization and the practical application for the work that we do every day and we're going to hopefully learn and grow as a result of that.

Another added that the NCDHC project "opens people's eyes that these projects are doable."

Other interviewees said that completing the NCDHC project allowed the public library to provide a new service to the community and to give valuable materials back to the community by making them more readily accessible.

We, like other public libraries have a significant amount of local history and genealogy research going on . . . there are collections here that people come from far away to be able to take advantage of and we have a limited staff to be able to help folks.

Digitizing these materials makes them available to more people outside of the library and allows library staff to spend more time assisting people in the library with more in-depth research questions.

Furthermore, the NCDHC project also allowed the public library to improve on its existing services in some situations. One interviewee explained that "one really strong point of having [the NCDHC] help smaller institutions with this is their resources and their ability to link similar items that can really enrich someone's research of a topic." She gave an example of a particular photograph her library digitized, which depicted a

local theater. When the librarian found the image on the NCDHC website, she then clicked on a link to other related resources and found a biography of the theater's architect and the blueprints for the theater, which were contributed by another institution. Of the find, the interviewee said "this would otherwise be impossible so that's just an invaluable collaboration."

One public library that has no digitization equipment in-house saw huge potential to improve their existing services because they "do a good bit of mail reference assistance or research assistance for people who want obits or a clip from a local newspaper from an event that may be pertinent to a family member's life." According to the librarian, putting this material online is a "win-win for both the requester and the library [because] it will be right there at their fingertips. They don't have to wait for this good old fashioned through the mail response to an inquiry." Even the institutions that have the equipment to provide these remote reference services saw digitization as a benefit in other ways that improved services they already provide. One interviewee explained how digitizing primary source materials would improve how the library services local elementary school students:

There were literally zero resources that you could turn [elementary school students] loose to see and have access to . . . You certainly couldn't have in a local history room in the public library, 100 or 200 kids trying to research the same thing at the same time, and particularly with what were fragile materials that were not intended for that age group to begin with. With digitization . . . look at all the simultaneous users.

Several of the interviewees highlighted the fact that they felt their project with the NCDHC in some way enhanced the image of the library within the community. As one interviewee put it:

We go out to the digital heritage website and we see our name up against Duke University and some of the other very big educational and cultural institutions in this state and we feel very proud, quite frankly, because we're a very small county and we are a very small library but we are out there with the big boys. So I think that that makes a very powerful statement for us as a small library in a small community.

Another interviewee had this to say about how her public library's project with the NCDHC improved the library's image within the community:

The library administration thinks of this collection as one of the jewels of the library system and so I think the good publicity that the library has gotten from having these bodies of information digitized has been wonderful. It's brought us good publicity, people recognize the importance of these materials and they're very appreciative of the work the library's doing so it's definitely benefited the library.

Several public libraries indicated that their involvement with the project gave them a stronger position to request funding from library administrators or county government. One interviewee said that she hoped the NCDHC project had encouraged the library director to "budget funding for a digitization project. Another added that "having accomplished this first digitization project and having it be out there in such a high profile manner, I hope will make it easier for me to get funding for additional projects." Another public library contact said "It's given us some credibility ... people see the value of it. Should we have to start investing our own money in it, we have something to stand on now." One interviewee did consider a possible downside to requesting additional funding for digital projects. He said:

We're in the infancy of our digital services, I think a lot of public libraries are ... so if you want funding for these kinds of digital projects, this is a help, this is something you could show your local funding agencies. But you do have to wonder if the downside is the attitude of 'We can cut the hours of the library because you're going digital.' So it's a mixed bag.

A couple of interviewees indicated that another benefit of contributing materials to the NCDHC was that it allowed the public library to improve the organization or description of the physical collection. One interviewee said the NCDHC project was a “great way to organize your materials if they are not already” and another said that “it gives a wonderful opportunity for a library to really stop and take a look at what it has that would be good potential content for the digital heritage center collection.” Another interviewee, when asked whether contributing materials for digitization encouraged the public library to organize its physical collection responded:

Absolutely, [another librarian] had done a tremendous job in terms of organization of these materials but we went into this with the attitude that we’re going to improve upon what we’ve got. As far as organization is concerned, yeah, that was one of the side benefits for us too.

It is important to note that not all public libraries took advantage of the opportunity to better organize or describe their materials. One public library contact said of the documents they contributed to the NCDHC, “they’re actually not currently cataloged at this time either.”

Other public library contacts indicated that, after having completed their project with the NCDHC, they were more open to the possibility of participating in additional collaborative digital projects in the future. One interviewee anticipated future involvement with the NCDHC itself because they “have that trust built now.” Another interviewee saw the potential for future projects with other local institutions. He said:

We have some other small museums here in the county . . . if we develop our role in reaching out to them to offer our services with their paper collections and their photograph collections, managing those, as appropriate materials present themselves, I’d like to promote those institutions working with the NCDHC and make them aware.

Another interviewee pointed out that “libraries working with various institutions with their special collections, they can look to us and to the NCDHC as a partner for advice and assistance in handling these difficult items.”

One of the most commonly cited benefits of participating with the NCDHC project was the opportunity to share resources and expertise. One public library that had been involved with digitization projects in the past said “funding is always an issue.” She went on to say “we had dabbled with some [digitization] in-house but our resources are limited since we’re a public library so when the digital NC project came along it was a dream come true to have some help with that.” Another interviewee explained it this way:

For small institutions, in particular, there is no point in having to spend money to buy scanning equipment of various types, figuring out how to run it, how to maintain it, teaching yourself or moving up the learning curve for learning how to perform with it, having to go out and spend money on CONTENTdm . . . As far as I’m concerned, the Heritage Center represents an opportunity to do something that there’s no way many small institutions could do on their own.

As another interviewee pointed out “as a public library with limited resources, it’s just invaluable for someone that has the resources to come in and help us and give us an avenue to make these things more accessible in a digital format where they can be used [and] preserved.” Another interviewee said of the NCDHC, “They had expertise, they had equipment, they had the means to do what we could not have. That’s been a tremendous value rather than everyone having to figure it out on their own.”

In response to the question of how participation with the NCDHC benefited the public libraries, not all of the interview responses were specific. More often, the interviewees offered general praise for the NCDHC program, its staff and its services. One interviewee described the NCDHC as “a first-class operation.” Another said that it

was “like the answer to a prayer for our library.” Another interviewee said “I very much like that they give credit where credit is due, they see us as partners.” Another interviewee added the following:

I just have the highest respect for the operation that [the NCDHC] has set up...very professional but very cordial and easy to work with and, quite frankly, they have high standards and I loved that because I have high standards. I learned a lot and I just highly recommend those folks.

Other interviewees felt the same way, saying “we had a positive experience, they did everything they said they would do in the time they said they would do it” and “they really do stand by their work.” Another interviewee said, “I can’t say enough good things about them.”

As evidenced by the interview responses above, the overwhelming reaction from public library contacts was that the experience of having contributed materials to the NCDHC was a positive one. Even so, several interviewees learned valuable lessons and were able to offer examples of what they would have done differently if they could go through the process again. Many of these lessons related to organization of the project itself. One interviewee said:

One thing that I would have done differently is we were a bit scattershot in terms of our end of organizing and putting things together. Things like metadata, I would have liked to have been a little more methodical in the way that we went about contributing stuff.

The same interviewee still went on to say that, “In the end, it all came out in the wash very nicely.” Another interviewee added “I would have loved to have more staff resources to spend time on the material and not take as long as it did to get through the material and send it, and I of course I want staff working on the descriptive styling.”

Based on their experiences in contributing to the NCDHC project, these public libraries had some advice they felt could benefit other public libraries that may get involved with the NCDHC in the future. One interviewee would advise future participants to “be very careful setting the scope of your project” because staff time and resources can be an issue. Others added “I think some kind of organization is important” and that future participants should plan their projects with “a little more structure.” Another interviewee expanded on this idea, saying “get your collection together, organize your stuff, structure your metadata in some way that it can be plugged in versus having to go and fill in the blanks like I did quite a bit. Be more methodical about it.” Another interviewee’s advice to public libraries that may contribute materials to the NCDHC in the future was to “be prepared . . . to be a good partner. We don’t want to call on the Digital Heritage Center before a project really is ready.”

Despite lessons learned and decisions that, in hindsight, might have been made differently, all of the public libraries that completed projects with the NCDHC were confident that other public libraries in North Carolina should get involved. As one interviewee put it, “I would certainly encourage other public libraries to take advantage of the situation and get on board with this.” Another said “stop hesitating and jump in!” Another interviewee added “I just think it’s such a blessing to be able to make these kinds of things available online, they are just treasures, and now anybody can see them.” Yet another interviewee said, “I can’t see what anyone has to lose in participating with the NCDHC. It makes the local library look good, it increases access and preservation.” One interviewee had this to say about her public library’s overall experience in contributing to the NCDHC:

It's not as hard as I imagined, I kept stalling and waiting to learn more and I thought I had to know everything before we could have a project like this but because the digital heritage center made it just so easy for us to take this step. Now I don't think we're so scared of the idea . . . Don't think you have to try to learn it all before you call [the NCDHC].

Another interviewee said, "Look at the quality of what they're doing and look at the end product, it's something that your library could be proud of."

Seven of the nine public libraries interviewed have considered what they might do to preserve and maintain access to their online historical materials if the NCDHC were to cease operating (see Figure 11). Four public libraries already host content online that is available from their home library website and these libraries indicated that they would try to add the material to what is already available online. As one interviewee said "I think our digital library staff would take on that role." Another public library contact indicated that they are still working on digitizing their materials in-house, saying "it's a slow process but . . . I'm trying to get the most important, the rarest, the most requested materials online. We've got volunteers and a scanner so we're chipping away at it." Another interviewee, whose public library owns space on CONTENTdm said of their digital images, "the ones that we already have the digital image for, we are planning to maintain in-house."

Plan to Maintain Access to Digitized Materials in Absence of the NCDHC	
Response	Number of Public Libraries
Yes, Please Describe	7
No	2

Figure 11. Public libraries that have considered how they might preserve and maintain access to their digitized materials if the NCDHC were to cease operating (Responses to Interview Question 22).

Three other public libraries, although they do not currently host materials on their home websites, indicated that it is something they would like to do in the future. As one interviewee said:

We did ask for our own digital copies . . . we haven't used those in any way but we also benefited from having digitized them and we have ownership here in the library if, in the future, we want to do something with that. So we took advantage of that capability.

Another public library that requested copies of their TIFF files from the NCDHC said, "We're planning on doing our own digital repository within our library someday... and put some kind of access online." Another interviewee added that his public library has "talked about taking the images that we have in-house and putting them up on the website. There's been too much work put into this, we would have to put it up somewhere at the very least on Flickr or something." Another interviewee added, "I put too much work into this thing to let it languish."

Two interviewees indicated that they had not considered how their public libraries would cope in the event that the NCDHC were to cease its operations. As one interviewee put it, "Oh lord no! It hasn't even entered my mind. We'll be distressed." The other said "No because I haven't even wanted to consider the possibility truthfully. I don't know what we would do if they weren't there, that would pose a real predicament for us."

Only three of the nine public libraries specifically indicated that they are currently pursuing additional digitization projects either in-house or with the NCDHC (see Figure 12). One public library is still working on small-scale digitization projects in-house; another is investigating ways, either through outsourcing or through the NCDHC, to digitize some of its rare materials that did not quite fit the scope of the NCDHC project.

The third public library is still in the process of contributing materials to the NCDHC for digitization.

Currently Working on Digitization Projects (In-House or with the NCDHC)	
Response	Number of Public Libraries
Yes, Please Describe	3
No	6

Figure 12. Public libraries that are currently working on digitization projects, either in-house or with the NCDHC program (Responses to Interview Question 23).

Two other public libraries have indicated that they have more materials they are interested in contributing once the NCDHC is capable of and comfortable with digitizing audiovisual materials. As one interviewee said, “We have some 16mm films that we thought might be significant for the Digital Heritage Center.” Both of these public libraries also indicated that they have other material they can contribute if the NCDHC is looking for more materials in the future. As one interviewee said of the NCDHC project:

I would love to contribute more materials. Some of the materials I’d like to contribute don’t fit within the scope of what they’re doing right now, unfortunately, but they’ve been great about discussing options and perhaps in the future they can change that.

Discussion

Limitations of the Study

The primary limitation of this study is that it only applies to North Carolina public libraries. With adequate time and resources, it would have been advantageous to gather data about the collaborative activities of all of the institutions that have contributed materials to the NCDHC, not just the public libraries. Information about formal and informal cooperation among these institutions could have provided valuable insight about how involvement with the NCDHC might foster working relationships among cultural

institutions on a much larger scale. In addition, such information would have provided an appropriate comparison for the same data about public libraries.

A similar limitation is that the study covers only those North Carolina public libraries that have already contributed to the NCDHC. It would have been helpful to survey or interview North Carolina public libraries that have not contributed to the NCDHC to determine (1) if they are aware of the NCDHC and its activities, (2) if they own materials that would fit the scope of the NCDHC project, and (3) the extent of their collaboration with other cultural institutions that is not influenced by participation with the NCDHC. It would also be helpful to understand why these public libraries have not yet contributed to the NCDHC project so that those concerns could be addressed. One interviewee, in describing its project with the NCDHC said, “We have some rare items in our collection, which for a public library is pretty unusual.” However, many other interviewees felt that the opposite was true. As one interviewee said, “There are a lot more riches in North Carolina than what might have come to the surface.” Another said “The sky’s the limit . . . there’s so much stuff that’s out there that’s not been uncovered yet.” Another interviewee told the story of how a member of the local community came into the public library one day with an old shoebox of documents. It turned out that the shoebox contained land grants from a prominent family dating back to 1700s. The patron donated those items to the public library and, of the experience; the interviewee said, “All these little libraries have all these little treasures.” These interview responses demonstrate that the interviewees believe that other public libraries in the state of North Carolina have rare historical materials that they could contribute to the NCDHC.

Another limitation is that not all of the public libraries that contribute to the NCDHC project were suitable or available for interview. As previously discussed, six public libraries were excluded from the study either because their submissions were limited to newspaper suggestions or the materials they contributed to the DigitalNC website were not actually digitized by the NCDHC. Each of these public libraries was excluded from the study because the researcher assumed that many of the questions about collaborative efforts or cooperation would not apply based on the limited scope of the project. There is no way to be sure of this and perhaps if these public libraries had been included in the study, they might have shared valuable insight about collaboration and cooperation. One public library was excluded because the staff member responsible for the project had retired. This is important to note because this public library did contribute a substantial amount of original material and their involvement with the NCDHC was similar to the nine public libraries that were included in the study. As the experience of each public library was different, information about their particular situation might have lent some additional insight to the analysis.

Limiting interviews to only the primary contact at each public library may also have inadvertently omitted the relevant knowledge and experiences of additional staff members who worked on the project or who contributed in some other way. Most of the interviewees indicated that more than one person worked on the project or was involved in some other way and the liaisons may not have been able to speak knowledgeably on the formal training or informal information gathering activities of other staff involved with the project. One interviewee, in describing an employee's previous experience with

and knowledge of digitization said “exactly what she did, I’m not sure; she would be in a position answer that question better than I could.”

In addition, the limitations of human memory are a concern. Some of the earliest projects were completed more than a year ago and the project liaisons may not have remembered all of the collaborative or cooperative activities that took place in preparation for the submission of materials. Some conferences or training sessions or other informal collaboration efforts may be omitted from the interview responses if they could not be recalled. One interviewee, trying to recall what formal training sessions he had attended in the past, admitted “I can’t remember specifically, there was something I went to at the State Library. I have to confess memory fails me on that.”

Another limitation is that many of the public libraries that were interviewed had only recently completed their digitization projects with the NCDHC. These public libraries may not have had enough time to see the effects of putting their local history materials online or to decide whether their involvement with the NCDHC had an effect on how use of their materials has changed or increased. Many interviewees could not speak to whether or not use of the materials they contributed to the NCDHC had changed or increased as a result of their being available online. Either the people interviewed did not have access to or regular encounters with these requests or they do not track it in a way that they would know if there were changes or recognize trends. Being able to quantify exactly how digitization and remote access changed or increased use of those materials would be of value to many public libraries but it is not something they can track easily or consistently.

Another limitation is that a great deal of information could have been gathered about how public libraries collaborated with other cultural institutions to address copyright concerns for the materials they planned to digitize. The NCDHC does what it can to avoid copyright infringement but if copyright status cannot be determined for an item, it will post that item online with the understanding it will be taken off the site if issues arise. Copyright issues are a major obstacle for reproducing and disseminating materials and could be a major factor in a public library's decision not to contribute materials to a collaborative digital project like the NCDHC. However, that topic could have been an entire paper in itself and so is beyond the scope of this research study.

A final limitation of this study is the lack of measurable metrics available for evaluating the success of a digitization project. It would be interesting to see if public libraries that reported engaging in more collaborative activities with other institutions had more successful projects than those that did not. Unfortunately, the criteria for evaluating this success are limited to techniques that allow for a great deal of ambiguity. With more time, web statistics for completed projects, counts of reference transactions related to the digitized materials, the rate at which individuals and organizations offered to contribute additional materials to the project, and in the future, the frequency of Web 2.0 contributions and comments could all provide evidence to support or refute the relative success of these individual projects.

Study Significance and Implications

Rather than focus on the activities of a single public library as a case study, this research study examined the activities of several public libraries that have made

substantial contributions to the NCDHC project in an attempt to understand the collective experience. The goal of this research study was to discover patterns of behavior that would reveal whether those public libraries engaged in increased collaboration, formal or informal, with other cultural institutions to acquire knowledge and skills that would aid them in the process of selecting and describing materials for submission. It also aimed to reveal the types and frequencies of collaborators and the predominant cooperative practices used by public libraries that contribute materials to the NCDHC. In order to make sense of the collaborative activities of public libraries that contributed to the NCDHC, it is first important to understand the circumstances of their involvement and what they hoped to accomplish.

According to NCDHC staff, they have reached out to potential partners in a number of different ways. The NCDHC does have projects that focus on specific types of materials, including yearbooks and newspapers. For these projects, the NCDHC reaches out directly to certain institutions. For other projects, like those with the public library partners, the NCDHC has mostly solicited participation through mailing lists, workshops and conference presentations but they are also contacted by institutions who have heard about their services from colleagues at other institutions. The results of this study reinforce those statements because most interviewees indicated that their initial awareness of the NCDHC project was a result of promotional events sponsored by state cultural institutions or professional associations or through word-of-mouth and networking. This shows that, while many public library employees are communicating with other institutions and colleagues, others may be less active in attending such conferences and workshops or have fewer opportunities to network. The NCDHC has an

opportunity to increase awareness of its program and services by advertising in other ways. It may be beneficial for the NCDHC to contact individual public libraries directly to solicit involvement and contributions of general materials related to the history and culture of North Carolina.

For the most part, public libraries are getting involved with the NCDHC to serve their communities and further their mission of providing access to information. The assumption was that public libraries that contribute to the NCDHC were more interested in improving access to their historical materials than preserving those physical materials for the future (Allen, 2000). While preservation of the historical materials that contain that information was a stated priority for only two of nine public libraries, interview responses indicated that even when access is the primary concern, preservation is seen as an added benefit. The opposite is also true; the two libraries who were primarily concerned with preserving their valuable materials indicated that providing access was a bonus. In completing these digitization projects, public libraries recognize that preservation and access go hand-in-hand.

Many public libraries also recognized that any digital project they completed in-house would not be of the same caliber as the NCHDC project, so they contributed materials to the NCDHC to take advantage of the opportunity to share resources. Most public libraries that contributed materials to the NCDHC do own some basic digitization equipment but they find it inadequate in many cases. Even though these public libraries have the capability to digitize materials in a technical sense, some do not think of themselves as owning “digitization equipment” because that equipment does not meet their needs. The flatbed scanners they describe cannot accommodate the volume of

materials or produce the quality images that the NCDHC equipment can. These public libraries have opted to avail themselves of the services of the NCDHC because the quality and quantity of the digital project is far superior to what they can produce on their own. As one interviewee put it:

The only thing we had and still have, truthfully, is a small flatbed scanner. So we do have the capability to scan photographs and some documents but we were not equipped to photograph artifacts, and we can't do documents above letter size so I sent [the NCDHC] all kinds of things that I had no way to scan.

About his public library's decision to get involved with the NCDHC project, another interviewee said, "Well we've got all this stuff, what if we digitized it? And looking at the scanning capabilities we have at this library, well . . . it wasn't going to happen anytime soon." Another public library contact explained:

About five years ago . . . we solicited people in the community . . . to scan [photographs] and make them available to the public . . . but something of this size, we didn't have the equipment to handle the scanning.

Another interviewee summed it up nicely, saying, "The North Carolina Digital Heritage Center is filling a tremendous need for assistance with the things which are difficult for us to handle." Even public libraries that technically might be able to complete digitization projects on their own are choosing to collaborate with the NCDHC because it can complete the projects faster and with better quality results.

Most of the public libraries had at least one staff member with previous knowledge of or experience with digitization but the sources and extent of that knowledge varied widely. Some learned about digitization by reading about the subject, others consulted with other professionals or received training while on-the-job. Others reported engaging in more formal continuing education activities like webinars, workshops and conferences. Several interviewees learned about digitization through a

combination of these methods, which reinforces the findings of Maroso's (2005) *Basics and Beyond* study because the interviewees recognized the importance of informal communication as a complement to more formal training and experience. In addition, the interviewees that took advantage of formal continuing education opportunities attended training events that were offered by NC ECHO or the State Library of North Carolina and of those, only a two opted for sessions that lasted longer than one day. This also reinforces the findings of the *Basics and Beyond* study (Maroso, 2005) because the interviewees preferred training options that were offered locally and could accommodate their busy schedules and limited budgets. As one interviewee stated, "we very seldom send more than one person to a workshop because we're so small-staffed that it's hard to do that." Based on this information from interviewees about their prior experience with and knowledge of digitization, public library employees were already engaging in some form of collaboration to learn about digitization before they contributed materials to the NCDHC.

With respect to the particular circumstances of the NCDHC, contributing alone is an act of collaboration because the program operates in a "constellation model" which means that each contributing institution is a self-sufficient team that operates within the mission of a broader partnership (Frick, 2011, p. 11). Although the NCDHC takes on much of the burden of a digitization project by scanning the materials, hosting them online, and handling copyright issues, it leaves the responsibilities of selection and description to the participating institutions. While it is true that many public libraries own historical materials, caring for and providing access to those materials has traditionally been the responsibility of archives and public library staff may not have had adequate

training to effectively select and describe materials. It is thus reasonable to believe that public libraries would encounter situations where it was beneficial to reach out to others in the field for guidance, information or advice to deal with these responsibilities related to selection and description.

Surprisingly, the results of this study indicate that public libraries largely did not engage in increased collaboration, formal or informal, with other cultural institutions in order to contribute to the NCDHC for assistance or guidance with either selection or description. However, the interview responses provide evidence of several factors that explain this phenomenon.

As a rule, the NCHDC does not engage in any direct collection development, meaning they do not solicit cultural institutions for specific materials or try to cover particular topics, events or time periods. The only exception to this policy is for the NCDHC's digital collections related to yearbooks and newspapers. All submissions must have some relationship to the state of North Carolina but beyond that, the NCDHC implicitly trusts the institutions and their staff to know what their patrons want and what their digitization priorities are, and the interview responses support this finding. Because the NCDHC does not tell institutions what to submit, making choices can be difficult, particularly for public libraries that may not be familiar with appraisal and selection criteria for unique, unpublished materials. As one interviewee said:

A lot of the people that come in here are doing family research and we have a very good collection [for that]. So that sort of stuff we had to be very selective about what we wanted to put up because there's so much of that stuff . . . It's a little hard to pick and choose.

Some selection decisions were relatively straightforward. For example, the public libraries' criteria for choosing materials to submit to the NCDHC often mirrored their

respective goals of preservation and access. The public libraries that indicated preservation as their priority selected materials that were damaged or fragile and that they did not want handled as frequently. The public libraries that were more interested in providing access to materials selected those of most interest to the local community first and they were sometimes able to choose frequently requested items. These public libraries also sometimes selected materials in need of preservation.

Even for more complex selection decisions, public libraries tended not to seek advice or guidance from outside sources. Although several interviewees indicated that selecting materials for digitization was difficult at times, they were ultimately satisfied with the decisions they made. As one interviewee put it:

I had so much stuff here and so many images of [the county]. . . At first, you get really excited; you want to digitize everything . . . but as we went it, we could to a certain extent sort the wheat from the chaff.

One explanation for this is that several public library project liaisons, by virtue of their position, were already quite familiar with the materials. In fact, four of the nine public libraries interviewed indicated that the person responsible for making decisions about what to contribute to the NCDHC acted as the local history or genealogy librarian and was responsible for providing reference services for those materials. This knowledge could make selection decisions easier for these interviewees. As one such interviewee said, “I had an eye for what might and might not be useful.”

Even those public library project liaisons that were administrators or library directors were able make selection decisions without the expertise of other peer institutions. As one interviewee explained, she did not seek any outside assistance with selection criteria for what to submit to the NCDHC because she “looked at the work they

had done already as an example.” While this can be considered an indirect form of informal collaboration, she is the only interviewee who mentioned having done this. The other interviewees who were administrators or directors did not feel that they needed to communicate or share information with colleagues to accomplish their selection tasks.

The NCDHC requires each partner institution to provide metadata for the materials it contributes; therefore, the other responsibility left to public libraries is description. Again, since providing access to primary source materials has traditionally been the responsibility of archives, public library staff may not be familiar with appropriate description techniques. Most of the public libraries indicated that there was little or no metadata associated with the materials they contributed to the NCDHC, so it makes sense they might turn to other sources for guidance or assistance. Surprisingly; however, most public libraries did not seek out information or guidance about how to apply descriptive metadata to the primary source materials they submitted to the NCDHC. Interview responses provide some insight into why this is the case.

First, the NCDHC has a limited metadata requirement, which means that an institution only has to provide minimal descriptive metadata for the items it contributes. Although contributors are encouraged to provide date and location information for materials when possible, title is the only required descriptive metadata field. The template spreadsheet that the NCDHC provides is very straightforward and allows staff at partner institutions to enter descriptive metadata in a format with which they are comfortable. Furthermore, the NCDHC has a content management system in place and contributing institutions are not required to learn how to use it. Once partner institutions provide descriptive information using the spreadsheet, the NCDHC staff converts that metadata

into a format that meets the requirements of its metadata schema. One interviewee, in describing the process of supplying descriptive metadata about the materials his public library submitted to the NCDHC said:

We mostly went through Google Docs and I did a lot of that stuff myself. The spreadsheet was very nice because I could do a lot of the stuff off the top of my head from my knowledge of it but we added the metadata after we sent the images. [The NCDHC staff] also did a lot of metadata stuff themselves.

Another factor that explains why public libraries did not seek outside assistance or guidance with description is that, in many cases, the staff member responsible for applying the metadata was already familiar with the materials he or she was describing. One public library contact said the “reference librarian whose primary responsibility was these materials was the one who worked to get the photos identified and input the information and tag them before they were posted online.” Another interviewee said that the individual whose task it was to assign descriptive metadata was also “the individual on our staff whose daily responsibility as a reference librarian is to maintain our local history and genealogy collection.” Another interviewee responded similarly, saying that describing the materials was relatively straightforward because she was “mostly familiar with the materials, mostly [from] personal knowledge.”

Most of the public libraries did not engage in increased collaboration, formal or informal, specifically in preparation for the NCDHC project. When they did, it was to gain a general understanding of the theories and technical practices involved in digitization and not to aid them in their responsibilities of selecting and describing materials. This holds true, even for those public libraries whose staff did not previously have extensive experience with or knowledge of digitization. This is because, ultimately, the NCDHC operates in a way that allows public libraries to contribute to such a project

without having to be knowledgeable about the technical, legal and theoretical aspects of digitization. The interview responses provide evidence in support of this finding.

Interviewees said “there wasn’t that much to do on our end except deliver the materials” or explained that it “was nothing but simply calling them up and saying ‘Would you digitize these materials?’” Another added, “There was no expertise on our end required, they did it, there was nothing on our end to do.” The NCDHC staff also offers a great deal of support and assistance to its contributing institutions, which the public libraries also found helpful. One interviewee said, “You really don’t have to have a lot of experience or to know what you’re doing. It sort of feels like taking a leap off into the deep end but once you do, there’s a raft there to save you.”

The results of this research are important because the North Carolina public libraries that have contributed materials to the NCDHC to date are not the only ones that own such materials. Other public libraries in our state may wish to provide remote access to those materials but have not yet done so and this could be for a number of reasons. Perhaps they are not familiar with the activities of the NCDHC, or, perhaps they are but think they lack adequate funding or personnel to put toward such a project. Perhaps some libraries are concerned about copyright issues and think it best not to participate in order to avoid the risks altogether. Perhaps these public libraries do not think that the benefits of contributing to the NCDHC will justify the costs in time and effort. Whatever the case, the institutions that have yet to contribute can learn a great deal from the results of this study. Understanding what motivated other public libraries to contribute to the NCDHC project and how they managed the project will inform potential contributors about how they might accomplish a similar project. The results of this study are useful for showing

those public libraries how they could benefit from completing a project with the NCDHC and what they can learn from the experiences of their predecessors.

The benefits for public libraries who contributed to the NCDHC ran the gamut, but the most frequently cited benefits related to how the project allowed public libraries to share resources and expertise and demonstrate their relevance and support to the communities they serve. Participating with the NCDHC allowed these public libraries to offer a service that they could not provide by themselves. Even if each of these public libraries could create individual digital projects, those materials would not be associated with those of other libraries or institutions in the state of North Carolina. All of these collections would be separate and distinct from one another and the synergistic effect would not exist. Many of the public libraries expressed the importance of taking advantage of these opportunities to work together and maximize potential. As one interviewee explained it:

It is extremely important in our profession that we network with each other, that we share expertise. It's going to be those, for want of a better word, symbiotic relationships that are going to certainly encourage and I would love to say ensure the survival of our profession.

Other interviewees echoed this sentiment. One said “not every individual at every practicing level can be the master of everything.” Another added “in terms of expertise and certainly in terms of financial resources, we’re going to have to find ways that we maximize by working together”

Public libraries that contributed materials to the NCDHC also understand the importance of demonstrating their relevance to the communities they support and that support them. All of the public library contacts indicated that the primary intended audience for the materials they chose to digitize with the NCDHC was the local

community. By showing that it is devoted to serving the community and using technology to provide a new and unique service, the public library can foster a stronger connection with its patrons. Several interview responses touched on this very idea. One interviewee said:

I think that's a growing area of public libraries now, our role has been changing and evolving. Those that can make a case that we are leaders in the community for preservation of local history . . . that strengthens our case I think.

Another interviewee explained that her public library wanted to participate with the NCDHC "to demonstrate to the community that this library really does have some incredibly valuable resources." She went on to say, "It's important for libraries to sort of toot their own horns these days and this was one way to do this." Another public library contact asserted that "It's the value added that's going to keep the public library relevant." In terms of digitization and new technologies, she went on to say:

If ever there were an institution that changes and adapts its role and relevance to the times, it's the public library. We need to embrace it, we need to look at all the possibilities and find a way to continue to grow as technology does.

By caring for these unique historical materials and presenting them proudly, the public library can ensure the support of community members who already understand the importance of preserving and providing access to these unique materials but it can also stimulate interest in those who might not yet fully appreciate the value of local history. One public library contact expressed his personal feelings about the project:

This project is very personal to me . . . This area and the county, I have a lot of ties here; this is about documenting the history of something that is really a part of me, personally. It's part of my own heritage and my own history.

He also strongly believed that others in the community felt the same way. Another public library contact confirmed this and said of the materials they contributed to the NCDHC, “this community has a strong identity to the collection.”

Providing online access to these materials can also promote interest and awareness in the community where there may not already be a lot of interest in the materials. As one public library contact said, “this is really important stuff and . . . it’s become a source of pride but it’s also stimulated interest in our community” Another interviewee explained it this way:

It brings focus to your collection. A lot of people think it takes away from your collection because you’re putting things out there that people don’t have to come into your repository to look at it, but . . . you offer things out there that people would be interested in to show that you have other things people would be interested in.

One anticipated benefit was that public libraries that completed a project with the NCDHC would build stronger relationships with other cultural institutions. This did not seem to be the case because most of the public libraries that have already contributed to the NCDHC project already had relationships with other cultural institutions. One interviewee explained that contributing to the project did not cause any change in the public library’s relationships with other local institutions because “we already had a pretty robust relationship with those people.” Interview responses indicate similar situations in other public libraries. One interviewee said:

I’ve been involved with the local historical society which runs our county museum . . . it’s the only county museum that there is . . . People think ‘Oh, a museum. I will donate my photographs or donate these papers or these objects.’ They don’t always think of the public library for photographs. So I’ve built a good relationship with [the museum] to share those and for us to digitize them [in-house].

This study also highlights some valuable lessons that public libraries learned in contributing to the NCDHC. Perhaps the experiences of public libraries that have already completed projects will show potential contributors what worked and what did not work and they can use the results of this study in planning future projects. The results of this study may also offer useful insight to the NCDHC itself about what challenges contributing institutions face in managing their end of the project and what opportunities exist for the NCDHC to help them address those challenges.

All of the public library contacts interviewed were adamant that other public libraries should get involved with the NCDHC. Although they all maintain that contributing was a smooth and easy process, some interviewees were able to offer suggestions of ways to make the project go even more smoothly. Potential contributors are urged to take care to plan out each phase of the project, organize materials and apply description in a systematic way, and anticipate the time commitment required to complete the project from beginning to end. One public library contact explained that even though a volunteer had done some work to describe the photograph collection they submitted to the NCDHC, “it took me a lot of time to compile that metadata.” Another added that her public library’s project was “time consuming but not that difficult.” Even interviewees whose involvement with the NCDHC went extremely well indicated that these things were important to the success of those projects. One interviewee said that her public library’s “project was not burdensome because the materials were in order . . . and in pretty good shape already.”

Another recurring theme from the public libraries about what they would do differently or valuable lessons they learned was that promotion of the project is

important. One interviewee said, “I think particularly if the publicity part, the promotion part, raising the public awareness . . . if we all did a better job of that, that would be very interesting.” Another interviewee said “one place where we really come up short in our library is promotion.” Another public library said of their promotional efforts, “we just don’t have the staff with either the time or the ability to do it the way it really needs to be.”

This idea that promotion is important and something that public libraries should do a better job of can be connected to the fact that several public libraries found it difficult to say contributions of materials or information changed or increased in response to the online materials; however, those that could spoke to their publicity as a factor in that. As one interviewee said “If you’re really going to get a response with your marketing you’ve got to be consistent and persistent and we are neither to the extent that we could be.” One public library contact indicated that she was “surprised at the volume of materials” and “amazed they still have so much coming in.” She was quick to add however, that the library was still actively advertising their project with the NCDHC to the community and that probably had a great deal to do with it. This promotion is an area where perhaps the NCDHC could provide assistance to public library partners while also creating benefits for itself. As one interviewee said of the NCDHC project as a whole, “I’d like to see it become a little more publicized [because] people need to know this stuff is out there.” Another interviewee introduced the possibility that “perhaps [the NCDHC] might even like to issue a press release . . . that might be a very, very good thing to . . . build support statewide and recognition for them, and as well for the libraries.”

Areas for Further Study

While this study does address several issues related to collaboration among cultural institutions that contribute to the NCDHC, with more time, several other questions could have been explored. One potential area of inquiry would be whether public libraries continued to collaborate with the other cultural institutions after their involvement with the NCDHC was completed and, if so, in what capacity. Several interviewees indicated that they would be open to and interested in working with other cultural institutions on collaborative digital projects in the future, but the scope of this study focuses only on whether collaboration with other cultural institutions increased in preparation for participation with the NCDHC. This study does not investigate how involvement with the NCDHC promoted or encouraged collaboration after the conclusion of the project. It would be interesting to see if public libraries and cultural institutions found new ways to work together in different situations or on other types of projects.

An area of particular interest that could not be addressed fully in this paper was how the concept of informal collaboration could be extended to include private individuals or organizations within the community. Examples from the literature, as well as interview responses from this research study, indicate that a number of digitization projects are contacted by members of the community with offers of donated materials after making their collections available online (Pierson, 2010). However, collaboration from private individuals can also include intellectual contributions in the form of information that helps to describe the local history materials found on the NCDHC website. Individuals have also contacted the NCDHC and contributing institutions with such information, but without any Web 2.0 functionality, people who want to share that

information must contact either the NCDHC or the contributing institution directly and these interactions can be difficult to track. The NCDHC plans to implement a system where users can enter free text comments about any of the items they find on the DigitalNC website. An area of potential study is how Web 2.0 functions might affect the community response to and interaction with this project when it does become available. Both the contributing public libraries and the NCDHC staff are anxiously awaiting the Web 2.0 capabilities and they hope that these user-supplied comments will improve the retrievability and keyword searching of the digital resources as well as provide richer detail and description of the items themselves. As one public library contact explained:

One of our dreams . . . is that people that are reading these files online will be able to comment on them and maybe they will offer us information we don't even know about for some of the pictures – Who was that? Where was that picture taken? That kind of thing.

Although the source and extent varied widely, most of the public libraries interviewed had at least one person on staff with some previous experience with or knowledge about digitization. On the other hand, most public library staff did not engage in increased collaboration, either formal or informal, specifically in preparation for their projects with the NCDHC. Although most projects went smoothly and the overall reaction from participating public libraries was that the experience was positive, some interviewees were still able to provide examples of aspects of the project that could be improved. Some of these related to planning the project or to organizing and describing materials. As one interviewee said, with respect to the description of materials “If I’d had a little more formal training in this versus picking it up as I went and playing it by ear . . . that would be the one thing I would have done differently on our end.” In the future, it might be of value to determine exactly what type of formal training would be most

valuable or useful to public library staff involved with projects that contribute materials to the NCDHC. Further, it would be interesting to determine if public library contacts think that the NCDHC could somehow provide additional training or guidance in specific areas to help streamline the process of contributing materials.

Another potential area for inquiry relates to the fact that many interviewees were not able to say whether use of their materials had changed or increased after being published online. Although some public libraries had been contacted by users who mentioned the fact that they found the materials on the DigitalNC website, as one interviewee pointed out “We have no way of knowing who is using the materials online and not contacting us about it.” There are public libraries that link to the NCDHC website from their library’s home website, but only one of them tracks the web statistics about patron traffic to or from the NCDHC site in any way. The NCDHC tracks web statistics for its own website using Google Analytics but individual public libraries may be overlooking the potential uses or advantages that this information could provide. In times of lower door counts and lower circulation numbers for physical materials, this information about how people are using digital or electronic resources could help strengthen claims that the public library is providing valuable services that people are using. In the future, it might be valuable to revisit these issues and how the NCDHC has been able to put its web traffic statistics to use and whether contributing public libraries have used web traffic statistics to bolster support for digital services like the NCDHC project.

Conclusion

As public libraries continue to shift their service models beyond providing physical materials within the library or electronic materials within the confines of the library, these one-time digitization projects could turn into a new strategic management tool (Evens & Hautekeete, 2011, p. 160). There are multiple benefits associated with collaboration and cooperation among cultural institutions of different types and the possibilities for new products and services are endless. Cultural institutions including public libraries face many challenges when starting a digitization project, but the NCDHC helps public libraries with little or no digitization experience or knowledge to participate in a collaborative digital project. Consequently, public libraries that have contributed to the NCDHC project did not engage in increased collaboration, formal or informal, in preparation for their projects. That said, public libraries may be missing out on the opportunity to make their projects even more streamlined and successful because seeking information and guidance from peer institutions and learning from the experience of others could make this process more manageable.

As successful as these collaborative digitization projects have been so far, many more public libraries have yet to digitize their rare and unique historical materials (Campbell, 2006). These institutions are passing up a great opportunity to support their communities in a new and unique way. Perhaps the results of this study about the experiences of public libraries that have contributed to the NCDHC will ultimately offer some guidance or advice to future contributors about how to get involved with a digital project. As more public libraries realize that providing online access to these special collections is possible, they will be anxious to provide a new service to their

communities. The NCDHC provides an opportunity for public libraries to take advantage of this opportunity, but if those public libraries also seek the guidance and expertise of other cultural institutions as they implement their digital projects, the possibilities are endless.

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Appendix A: Metadata Template Spreadsheet Provided by the NCDHC

Included in this appendix are elements of the template spreadsheet the North Carolina Digital Heritage Center provides to contributing institutions, which lists the metadata fields used to describe materials they publish online.

Also included are descriptions of each metadata field and instructions for completion, taken from the NCDHC Contributor's Manual.

Title	Creator	Publisher	Description	Transcription	Date	Date (numeric)	Location	Subject (Topic)

Subject (Geographic)	Subject (Name)	Subject (Images)	Theme	Type	Format	Language	Dimensions

Contributing Institution	Collection in Repository	Item/Call Number	Usage Statement	Contact Information

Title: REQUIRED. In most cases, the title will be assigned by the cataloger. It is up to the cataloger to decide how much information to include here.

Creator: When known, the name of the creator should be included here. Names should be taken from the Library of Congress Name Authority File (<http://authorities.loc.gov/>). If the name is not listed there, it should still be listed in LCNAF format.

Publisher: If the item was published, the name and location of the publisher should be listed here.

Description: Narrative description of the item. This free-text description can be as short or as long as necessary.

Date: This date field can include both words and numbers as necessary. For example, “circa 1950,” or “between 1980 and 1990.”

Date (numeric): This date field can contain numbers only. This field will not be visible to users, but will be used by the system to search by date. If you know actual dates (as opposed to years, list them in year, month, date (YYYY-MM-DD) format.

Location: This field should list the location depicted in an image or the location where an item was created. The location name only should appear here (for geographic subjects, use the Subject (Geographic) field). Contributors are strongly encouraged to list the corresponding North Carolina county for the location, whenever known.

Subject (Topic): This subject field, which describes the general subject of the item, uses Library of Congress Subject Headings (LCSH).

Subject (Geographic): This subject field is used to describe the geographic subject of the item. Place names must be listed in LCSH format.

Subject (Name): This field is used for names of individuals, families, or businesses depicted or described in the item. It will probably be used primarily for prominent or well-known people. The names should be authorized names from the Library of Congress Name Authority File, or, if they have not yet been authorized, should be listed in in LCNAF format.

Subject (Images): The subject field is used to describe the specific subject(s) depicted in the items. The field uses the Thesaurus for Graphic Materials (<http://www.loc.gov/rr/print/tgm1/>) to describe what is shown on the item.

Theme: This subject field is used for subjects or “Themes” developed for specific institutions and/or collections.

Type: REQUIRED. This field describes the general format of the item, using the Dublin Core Type Vocabulary (<http://www.dublincore.org/documents/dcmi-type-vocabulary/>).

For photographs, the term “image” will always be included in this field.

Format: REQUIRED. This field describes the specific format of the item, using the Thesaurus for Graphic Materials (<http://www.loc.gov/rr/print/tgm2/>). There can be multiple entries in this field (for example, “Photographs” and “Ambrotypes”).

Contributors are encouraged to use the term “Photographs” for all photographic prints, as well as more specific terms when appropriate.

Language: Language of the original item (may not be relevant for most images).

Dimensions: Size of the item. The dimensions used are up to the discretion of the contributor

Contributing Institution: REQUIRED. The full name of the organization that holds the original item.

Collection in Repository: If the item is part of a larger collection, the name of that collection can be listed here.

Item / Call Number: If there is a call number or item number for the item, include that here.

Usage Statement: REQUIRED. A statement about the copyright status and usage restrictions (if any) that will appear alongside the item. Some organizations may want to provide a single rights statement that would apply to all of the materials they contribute.

Contact Information: REQUIRED. This field will contain contact information for the organization that holds the original item. Contributors are encouraged to use general addresses, rather than contact information for specific staff members.

Appendix B: Interview Questions for Contributing Public Libraries

Area of Focus: Initial Awareness/Involvement, Motivations for Participation

- 1) How did your institution become aware of the NCDHC project? Did you approach the NCDHC with a potential project or did the NCDHC solicit your involvement?
- 2) Can you describe the motivations that led your institution to contribute to the NCDHC? Was this an experimental project or did you have materials that people used frequently that you thought would be popular if digitized? Was your goal in contributing materials to the NCDHC based more on providing access to the materials or more as a means of preserving the originals? Did you have any other motivations or goals in mind in participating with this project?
- 3) Can you describe your institution's involvement with the NCDHC project? Can you describe your personal role with respect to your institution's involvement with the NCDHC project? Did anyone else work on the project? If so, in what capacity?

Area of Focus: Previous Experience with Digitization

- 4) Does your institution own any digitization equipment (Scanners, cameras, etc.)? If so, what has that equipment been used for?
- 5) Had your institution completed or been involved in any other digitization projects prior to your involvement with the NCDHC? If so, was funding an issue? Did you outsource or do the digitizing yourselves in-house?
- 6) Prior to involvement with the NCDHC, did you or any of your staff (or volunteers, if applicable) already have any experience with or knowledge about digitization? To what extent and how was that experience or knowledge acquired?

- 7) Had you or members of your staff participated in workshops, conferences, webinars, classes or any other structured training offered by other cultural institutions? If so, please explain what these training sessions were and why the training took place.
- 8) Had you or members of your staff sought guidance or assistance in an unstructured or informal way from other cultural institutions or the employees of other cultural institutions? If so, please explain what information was sought and what purpose it was used for.

Area of Focus: Collaboration in Preparation for NCDHC Project

- 9) Did you or your staff participate in any workshops, conferences, webinars, classes or any other structured training activities in preparation for involvement in this project? If so please explain. Do you know which specific training events or activities they attended? Were outside trainings chosen because of a personal relationship with employees at the institution offering training, training at the suggestion of the NCDHC or its staff, training sessions that employees found on their own, etc.?
- 10) Did your staff seek informal assistance or guidance from other professionals in the history, museum, library, archives or technical or digitization fields to prepare for this project? Did your staff review literature or engage in other informal information seeking activities to gain knowledge to prepare for this project? If so please explain. Where did staff go to find this information? Were sources or experts consulted because of a personal relationship or because they were suggested by the NCDHC or some other institution, or were they found by staff searching on their own?
- 11) If staff participated in training (informal or formal) in preparation for making a contribution to the NCDHC, what was the purpose of that training? To gain general

understanding of digitization projects and the processes involved, to gain insight on managing a digitization project, to gain knowledge on selecting historical materials for digitization, to gain understanding about how to apply descriptive metadata to historical materials for digitization? Please indicate all that apply and explain any other purposes.

- 12) If staff participated in training (formal or informal) in preparation for making a contribution to the NCDHC, can you say which type of cultural institution provided the most useful guidance or information? Any specific institutions? Which ones? This could be museum, archives, library (public or academic), government entity or the staff from any of these. Were any specific institutions consulted more than once or most frequently? If so, which one(s)?

Area of Focus: Selection and Description Issues

- 13) On what factors did you base your selection of materials to digitize with the NCDHC project? (please address all that apply)
- Original material most in danger of loss if not preserved digitally
 - Material of most interest to local community of the public library (your county)
 - Material of most interest to local educational or school programs
 - Material of most interest to academic researchers with respect to the state of NC
 - Most frequently requested materials regardless of content
 - NCDH requested digitization of specific materials
 - Other (Please explain): _____

- 14) Did you have a specific audience group in mind when selecting materials for digitization? If so, what was it? For example, this could be K-12 teachers or students, the local public, local historians, the academic or scholarly research community, genealogists, etc. or maybe you did not know who would use it?
- 15) Did you already have some sort of metadata associated with the materials you decided to submit to the NCDHC? If so, please describe what kind and to what extent (by item, by aggregate or bibliographic or content information)? If so, did this make it easier when you completed the spreadsheet or Google document to describe the digitized items for the NCDHC? How so?

Area of Focus: Outcomes, Assessment, Evaluation, Lessons Learned, Future Plans

- 16) Have you done any promotion of your project with the NCDHC within your own library (in the library itself or on the webpage)? Have you placed announcements on the website, exhibits in the library, posters, fliers, email notices, or anything else?
- 17) Have you received offers from individuals or local organizations to digitize privately owned materials as a contribution to the collection you submitted to the NCDHC? Have members of the public asked about other ways they can contribute to the project or offered contextual or descriptive information about the materials you have digitized so far?
- 18) Can you say whether your contribution and involvement with the NCDHC influenced how use of these materials changed or increased? Please explain why or why not and explain what criteria you based those judgments on. Potential criteria are increased reference requests (in person or remotely) related to the materials available on the NCDHC website; increased requests for special programming or instructional

sessions from school or community groups related to the materials; requests for instructional or classroom materials from teachers.

- 19) For contributing libraries that link to the NCDHC website from their own: Do you track web use statistics or use any other tools to see how your material is being accessed? If so, how has that information been used to benefit the library?

For contributing libraries that do not link to the NCDHC website from their own: I noticed that you do not link to the NCDHC website from your library's home website. Have you considered linking to the NCDHC website from your home page? If so, why did you decide not to?

- 20) Can you explain how your contribution and involvement with the NCDHC has benefited the library itself? Please explain why or why not and explain what criteria you based those judgments on. Potential criteria are new knowledge base for the staff, new service to the community and those outside of the community, stronger relationships with other cultural institutions, potential for other collaborative projects in the future, stronger position to argue for budget or financial increases.
- 21) Do you feel that your experience with the NCDHC taught you important lessons that could benefit other public libraries working on similar projects? Based on your evaluations and results, are there things you would have done or would do differently with another project with the NCDHC? Based on the experiences of your institution, what advice would you offer to other public libraries that wish to contribute to the NCDHC project?
- 22) Have you thought about what would you do to preserve and maintain access to your digital materials if the NCDHC were to cease operating?

23) Are you currently working on another digitization project with the NCDHC or are you planning to do so in the future? Are you working on any in-house digitization projects or have plans to do so in the future?